s	er	Gly	Val 115	Gly	Asp	Ala	Pro	Gly 120	Thr	Ser	Asn	Gly	Ala 125	Thr	Val	Ser
s	er	Thr 130	Lys	Arg	His	Lys	Ser 135	Leu	Phe	Gln	Суѕ	Ala 140	Lys	Суѕ	Ser	Phe
	la 45	Thr	Asp	Ser	Gly	Leu 150	Glu	Phe	Gln	Ser	His 155	Ile	Pro	Gln	His	Gln 160
V	al	Gly	Gln	Xaa	His 165	Ser	Pro	Met	Ser	Pro 170	Leu	Trp	Phe	Val	Leu 175	His
L	eu	Суз	Gln	Leu 180	Pro	Gln	Pro	Pro	Pro 185	Leu	His	Cys	Pro	Gln 190	Gly	Glu
A	rg	Pro	Gly 195	Gly	Gly	Gly	Gly	Arg 200	Gly	Gly	Gly	Gly	Thr 205	Glu	Met	Ala
V	al	Glu 210	Val	Ala	Glu	Gln	Arg 215	Arg	Ala	Pro	Gly	Xaa 220	Xaa	Cys	Pro	Trp
	rg 25	Leu	Glu	Arg	Met	Asp 230	Trp	<b>L</b> ys	Asn	Val	Pro 235	Val	Ser	Xaa	Cys	Gln 240
L	eu	Thr	Gln	Arg	Arg 245	Gly	Asp	Cys	Trp	Ala 250	Arg	Pro	Leu	Arg	Thr 255	Met
V	al	Ala	Thr	Met 260	Ile	Thr	Xaa	Asn	His 265	Arg	Xaa	Xaa	Arg	Thr 270	Arg	Thr
A.	la	Thr	His 275	Cys	Pro	Leu	Arg	<b>C</b> ys 280	Asp	Arg	Arg <sup>.</sup>	Leu	Cys 285	Ser	Val	His
G:		Gln 290	Gly	Trp	Cys	Arg	Ser 295	Val	Phe	His	Leu	Pro 300	Суз	Gly	Pro	Trp
	ys 05	Ile	Lys	Gly	Ser	Ala 310	Pro	Ser	Val	Ser	Val 315	Thr	Gly	Cys	Thr	Leu 320

Glu

<sup>&</sup>lt;210> 939

<sup>&</sup>lt;211> 151

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

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Ala Ala Ser Xaa Gly Glu Gln Arg Glu Arg Ala Arg Leu Gln Thr Pro
                  5
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Thr Arg Pro His Ser Thr Ser Ala Arg Pro Arg Arg Gln Val Gln
Leu Leu Gln Leu Cys Gly Cys Ala Ala Lys Gly Xaa Ala His Gly Leu
Asp Val Thr Ser Pro Thr Val Ser Trp Leu Ala Cys Pro Cys Ala Arg
     50
                          55
                                              60
Pro Ser Xaa Ser Arg Gln Xaa Leu Gly Thr Ser Glu Glu Glu Pro Gly
 65
                     70
                                          75
Xaa Asn Gly Lys Gly Gly Ile Gly Val His His Ser Leu Leu Leu Trp
Ser Ser Thr Gly Gly Thr Xaa Met Glu Val Ser Cys Leu Thr Ser Leu
            100
                                105
```

896

His Cys Thr Gly Pro Gly Met Pro Ile His Pro Leu Ala Glu Asp Thr
115 120 125

His Gln Val Ile Cys Glu Glu Thr Leu Gly Ser His His Leu Lys Ala 130 135 140

Arg Gly Ser Pro Ser His Arg 145 150

<210> 940

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 940

Arg Cys Gly Trp Ser Ser Arg Ser Arg Ser Arg Cys Ala Arg Arg
1 5 10 15

Cys Pro Pro Ser Pro Cys Pro Thr Pro Arg His Val Pro Ser Ser Arg
20 25 30

His Pro Glu Val Cys Gly Leu Arg Thr Asn Ser His Arg Cys Leu Phe 35 40 45

Arg Pro Gln Leu Gln Ala Met Pro Ala Ala Gly Gly Val Leu Tyr Gln 50 55 60

Pro Ser Gly Pro Ala Ser Phe Pro Ser Thr Phe Ser Pro Ala Gly Ser 65 70 75 80

Val Glu Gly Ser Pro Met His Gly Val Tyr Met Ser Gln Pro Val Pro 85 90 95

15.

Ala Ala Gly Pro Tyr Pro Xaa 100

<210> 941

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE . <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <400> 941 Thr Ala Gly Arg Ser Asp Val Leu Pro Val Ala Gly Gly Glu Val Arg Ala Leu Gln Glu Gly Gly Cys Gly Asp Lys Met Lys Ile Phe Val Gly 25 Asn Val Asp Gly Ala Asp Thr Thr Pro Glu Glu Leu Ala Ala Leu Phe 40 Ala Pro Tyr Gly Thr Val Met Ser Cys Ala Val Met Lys Gln Phe Ala Phe Val His Met Arg Glu Asn Ala Gly Ala Leu Arg Ala Ile Glu Ala 70 Leu His Gly His Glu Leu Arg Pro Gly Arg Ala Leu Val Val Glu Met Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys Ile Phe Val Gly Asn Val 105 Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg Xaa Ser Ser Ser Ala Ala 115 125 Asp Ala Ser Ser Ser Val Thr Trp 130 135 <210> 942 <211> 61 <212> PRT <213> Homo sapiens <400> 942 Ile Met Lys Glu Ser Ser Val Leu Ala Lys Cys Ser Ser Ile Ala

10

Gly Tyr Ile Gln Trp Ser Ser Ile Asn Ser Tyr Leu Ser Gly Leu Asn

Gln Asn Cys Val Ser Leu Asn Ser Tyr His Thr Glu Gly Ala Ser Gln 35

Ile Thr Ile Phe Leu Ser Ala Val Phe Leu Gln Lys Ser 50 55

<21	0> 9	43													
<21	1> 5	80													
<21	2> P	RT													
<21	3> H	omo	sapi	ens											
<22	0>													•	
<22	1> S	ITE													
<22	2> (	52)													
		aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	0>														
<22	1> S	ITE													
<22	2> {	73)													
<22.	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	43													
	Ala	Gln	Ala			Ser	Ala	Arg			Gln	Ala	Phe	_	
1				5					10					15	
Ara	Δla	Arg	T.e.u	Glv	Tur	G1 v	Pro	Glv	Ara	Ara	Δτα	Pro	Pro	Ser	Δla
y		nr 9	20	_	-1-	O1,	110	25	**** 9	9	my	110	30	DCI	nia
Arg	Cys	Leu	Ser	Gly	Thr	Ala	Asn	Arq	Arq	Glu	Arq	Arq	Arq	Val	Gly
-	•	35		•			40	•	_		•	45	•		•
Leu	Ser	Ala	Xaa	Leu	Gly	Ala	Gly	Ala	His	Ala	Arg	Ala	Pro	Pro	Gln
	50					55					60				
Ala	Gly	Ala	Met	Ala	Ser	Gly	Ser	Xaa	Ala	Glu	Cys	Leu	Gln	Gln	Glu
65					70					75			•		80
Chr	Thr	Cys	Pro		Cys	Leu	Gln	Tyr		Ala	Glu	Pro	Met	Met	Leu
				85					90					95	
	_		•	_		_	_		_	_		_	_	_	
Asp	Cys	Gly		Asn	Ile	Cys	Cys		Cys	Leu	Ala	Arg		Trp	Gly
			100					105					110		
n L	23-	<b>~</b> 1	mh		**- 1	C	C	D	<b>61</b> -	a		<b>61</b>	m>	<b>5</b> 5-	D
LIIL	ALG	Glu	TIII	ASII	val	ser	120	PIO	GIII	Cys	ALG		THE	Pne	PIO
		115					120					125			
ะไก	Ara	His	Met	Ara	Pro	Asn	Ara	Hig	Len	Ala	Asn	Val	Thr	Gln	T.en
,	130			nr 9	110	135	y		Deu	****	140	V4.	1111	OI!!	neu
/al	Lys	Gln	Leu	Ara	Thr	Glu	Arq	Pro	Ser	Gly	Pro	Gly	Glv	Glu	Met
45	• -			- 3	150	'				155		- 4	- 4		160
-															
:ly	Val	Cys	Glu	Lys	His	Arg	Glu	Pro	Leu	Lys	Leu	Tyr	Cys	Glu	Glu
				165					170					175	

Asp	GIn	Met	180		Суз	Val	Val	Cys 185	_	Arg	Ser	Arg	190		Arg
Gly	His	Ser 195	Val	Leu	Pro	Leu	Glu 200		Ala	Val	Glu	Gly 205	Phe	Lys	Glu
Gln	Ile 210		Asn	Gln	Leu	Asp 215		Leu	Lys	Ārg	Val 220		Asp	Leu	Lys
Lys 225		Arg	Arg	Ala	Gln 230	Gly	Glu	Gln	Ala	Arg 235		Glu	Leu	Leu	Ser 240
Leu	Thr	Gln	Met	Glu 245	Arg	Glu	Lys	Ile	Val 250	Trp	Glu	Phe	Glu	Gln 255	Leu
Tyr	His	Ser	Leu 260	Lys	Glu	His	Glu	Tyr 265	Arg	Leu	Leu	Ala	Arg 270	Leu	Glu
Glu	Leu	Asp 275	Leu	Ala	Ile	Tyr	Asn 280	Ser	Ile	Asn	Gly	Ala 285	Ile	Thr	Gln
Phe	Ser 290	Cys	Asn	Ile	Ser	His 295	Leu	Ser	Ser	Leu	Ile 300	Ala	Gln	Leu	Glu
305			Gln		310					315	_				320
				· 325					330			·		335	
			Leu 340					345					350		
,		355	Glu				360					365			
	370		Ile			375					380				Ī
385			Asp		390					395					400
			Gln	405					410					415	
			Arg 420					425				_	430		
Phe	Ile	Ala 435	Gly	Arg	His	_	_	Glu				Gly 445	Asp	Lys	Ala

Lys Trp Thr Ile Gly Val Cys Glu Asp Ser Val Cys Arg Lys Gly Gly 460 450 455 Val Thr Ser Ala Pro Gln Asn Gly Phe Trp Ala Val Ser Leu Trp Tyr 470 475 Gly Lys Glu Tyr Trp Ala Leu Thr Ser Pro Met Thr Ala Leu Pro Leu 490 485 Arg Thr Pro Leu Gln Arg Val Gly Ile Phe Leu Asp Tyr Asp Ala Gly 500 505 Glu Val Ser Phe Tyr Asn Val Thr Glu Arg Cys His Thr Phe Thr Phe 520 Ser His Ala Thr Phe Cys Gly Pro Val Arg Pro Tyr Phe Ser Leu Ser 535 540 Tyr Ser Gly Gly Lys Ser Ala Ala Pro Leu Ile Ile Cys Pro Met Ser 545 550 560 Gly Ile Asp Gly Phe Ser Gly His Val Gly Asn His Gly His Ser Met 570 Glu Thr Ser Pro 580 <210> 944 <211> 437 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (317) <223> Xaa equals any of the naturally occurring L-amino acids <400> 944

WO 00/55350

Ser 1	Ala	Thr	GIY	Ser 5	GLY	Glu	Lys	Glu	10	GIY	Val	Thr	Ala	15	
Asp	.Ala	Ser	Arg 20	Thr	Thr	Phe	Thr	Arg 25	Glu	Gly	Ser	Phe	Arg 30	Val	Thi
Thr	Ala	Thr 35	Glu	Gln	Ala	Glu	Arg 40	Glu	Glu	Ile	Met	Lys 45	Gln	Met	Glr
Asp	Ala 50	Lys	Lys	Ala	Glu	Thr 55	Asp	Lys	Ile	Val	Val 60	Gly	Ser	Ser	Val
Ala 65	Pro	Gly	Хаа	Thr	Ala 70	Pro	Ser	Pro	Ser	Ser 75	Pro	Thr	Ser	Pro	Thr 80
Ser	Asp	Ala	Thr	Thr 85	Ser	Leu	G1u	Met	Asn 90	Asn	Pro	His	Ala	Ile 95	Pro
			100					105					Ser 110		
_		115					120					125	Arg		
	130					135					140		Lys		
145			•		150	-		•		155	•		Ala		160
				165					170				Thr	175	
_			180					185					Val 190		
		195					200					205	Ser		_
	210					215					220		Thr		
225		_	_	_	230					235			Arg		240
				245					250				Gln	255	
PIO	PTO	Thr	Ala	TTE	ser	GIN		Aia	ser	PIO	Fue	GIU	Gly	ASN	AIA

Phe Leu Thr Ser Gln Pro Val Pro Val Gly Val Val Pro Ala Leu Gln 275 280 Pro Ala Phe Val Pro Ala Gln Ser Tyr Pro Val Ala Asn Gly Met Pro 295 300 Tyr Pro Ala Pro Asn Val Pro Val Val Gly Ile Thr Xaa Ser Gln Met 310 Val Ala Asn Val Phe Gly Thr Ala Gly His Pro Gln Ala Ala His Pro 330 325 His Gln Ser Pro Ser Leu Val Arg Gln Gln Thr Phe Pro His Tyr Glu 345 Ala Ser Ser Ala Thr Thr Ser Pro Phe Lys Pro Pro Ala Gln His 355 360 Leu Asn Gly Ser Ala Ala Phe Asn Gly Val Asp Asp Gly Arg Leu Ala Ser Ala Asp Arg His Thr Glu Val Pro Thr Gly Thr Cys Pro Val Asp 390 395 Pro Phe Glu Ala Gln Trp Ala Ala Leu Glu Asn Lys Ser Lys Gln Arg 405 410 Thr Asn Pro Ser Pro Thr Asn Pro Phe Ser Ser Asp Leu Gln Lys Thr 425 Phe Glu Ile Glu Leu 435 <210> 945

<211> 160 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 945

His Gly Ser Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly
1 5 10 15

Ala Val Gly Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Arg Gly
20 25 30

Leu Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp
35 40 45

Ala Phe Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro
50 55 60

Ala Gly Ile Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys
65 70 75 80

Arg Lys Arg Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly 85 90 95

Arg Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys
100 105 110

Val Leu Gly Arg Leu Val Xaa Cys Pro Ile Glu Thr Gln Val Leu Arg 115 120 125

Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser 130 135 140

Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser 145 150 155 160

<210> 946

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (198)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 946

Gly Gly Asp Pro Pro Gly Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu

1 5 10 15

Pro Gly Phe Thr Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val 20 25 30

Thr Phe Leu Ser Ser Ala Thr Thr Ala Leu Ser Met Gln Asn Asn Ser 35 40 45

Val Ph Gly Asp Leu Lys Ser Asp Glu Met Glu Leu Leu Tyr Ser Ala

904

60 50 55 Tyr Gly Asp Glu Thr Gly Val Gln Cys Ala Leu Ser Leu Gln Glu Phe 75 70 Val Lys Asp Ala Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu Asp Gln Ile Thr Gly Gly Asp His Ser Arg Thr Leu Phe Gln Leu Lys 100 105 Gln Arg Arg Asn Val Pro Met Lys Pro Pro Asp Glu Ala Lys Val Gly 120 115 Asp Thr Leu Gly Asp Ser Ser Ser Ser Val Leu Glu Phe Met Ser Met 135 140 Lys Ser Tyr Pro Asp Val Ser Val Asp Ile Ser Met Leu Ser Ser Leu 145 150 Gly Lys Val Lys Lys Glu Leu Asp Pro Asp Asp Ser His Leu Asn Leu 170 165 Asp Glu Thr Thr Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Asp 185 Ala Ala Leu Gly Xaa Arg Pro Thr Ser Ala Pro Cys Pro Thr Pro 195 Pro Arg Gly Thr Ser Thr Trp Glu Ala Leu Leu Ala 210 215 <210> 947 <211> 316 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (293) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (312)

<223> Xaa equals any of the naturally occurring L-amino acids

Glu Gln Tyr Val Cys Ala Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys

<400> 947

1				5					10					15	
Lys	Met	Ala	Thr 20	Arg	Lys	Ile	Ser	Val 25	Ile	Thr	Ile	Phe	Gly 30	Pro	Val
Asn	Asn	Ser 35	Thr	Met	Lys	Ile	<b>A</b> sp 40	His	Phe	Gln	Leu	Asp 45	Asn	Glu	Lys
Pro	Met 50	Arg	Val	Val	Asp	Asp 55	Glu	Asp	Leu	Val	Asp 60	Gln	Arg	Leu	Ile
Ser 65	Glu	Leu	Arg	Lys	Glu 70	Tyr	Gly	Met	Thr	Туг 75	Asn	Asp	Phe	Phe	Met 80
Val	Leu	Thr	Asp	Val 85	Asp	Leu	Arg	Val	Lys 90		Tyr	Tyr	Glu	Val 95	Pro
Ile	Thr	Met	Lys 100	Ser	Val	Phe	Asp	Leu 105	Ile	Asp	Thr	Phe	Gln 110	Ser	Arg
Ile	Lys	Asp 115	Met	Glu	Lys	Gln	Lys 120	Lys	Glu	Gly	Ile	Val 125	Cys	Lys	Glu
Asp	Lys 130	Lys	Gln	Ser	Leu	Glu 135	Asn	Phe	Leu	Ser	Arg 140	Phe	Arg	Trp	Arg
Arg 145	Arg	Leu	Leu	Val	11e 150	Ser	Ala	Pro	Asn 	Asp 155	Glu	Asp	Trp	Ala	Tyr 160
Ser	Gln	Gln	Leu	Ser 165	Ala	Leu	Ser	Gly	Gln 170	Ala	Cys	Asn	Phe	Gly 175	Leu
Arg	His	Ile	Thr 180	Ile	Leu	Lys	Leu	Leu 185	Gly	Val	Gly	Glu	Glu 190	Val	Gly
Gly	Val	Leu 195	Glu	Leu	Phe	Pro	Ile 200	Asn	Gly	Ser	Ser	Val 205	Val	Glu	Arg
Glu	Asp 210	Val	Pro	Ala	His	Leu 215	Val	Lys	Asp	Ile	Arg 220	Asn	Tyr	Phe	Gln
Val 225	Ser	Pro	Glu	Tyr	Phe 230	Ser	Met	Leu	Leu	Val 235	Gly	Lys	Asp	Gly	Asn 240
Val	Lys	Ser	Trp	Tyr 245	Pro	Ser	Pro	Met	Trp 250	Ser	Met	Val	Ile	Val 255	Tyr
Asp	Leu	Ile	Asp 260	Ser	Met	Gln	Leu	Arg 265	Arg	Gln	Glu	Met	Ala 270	Ile	Gln
Gln	Ser	Leu	Gly	Met	Arg	Cys	Pro	Glu	Asp	Glu	Tyr	Ala	Gly	Tyr	Gly

906

275 280 285 Tyr His Ser Tyr Xaa Gln Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr 295 Arg His His Glu Ser Tyr His Xaa Gly Tyr Pro Tyr 310 <210> 948 <211> 162 <212> PRT <213> Homo sapiens <400> 948 Ser Thr His Ala Ser Ala His Ala Ser Gly Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu 20 25 Phe Leu Ala Leu Ile Gly Gly Thr Ser Gly Gln Tyr Tyr Asp Tyr Asp 40 Phe Pro Leu Ser Ile Tyr Gly Gln Ser Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser Ala Met Tyr Cys Asp Glu Leu 65 70 Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr 85 Leu Arg Asn Asn Gln Ile Asp His Ile Asp Glu Lys Ala Phe Glu Asn 105 Val Thr Asp Leu Gln Trp Leu Ile Leu Asp His Asn Leu Leu Glu Asn 115 Ser Lys Ile Lys Gly Arg Val Phe Ser Lys Leu Lys Gln Leu Lys Lys 130 135

Leu His Ile Asn His Asn Asn Leu Thr Glu Ser Val Gly Pro Leu Pro

150

. 155

Lys Ser

WO 00/55350

907

<21	0> 9 1> 1	85													
	2> P 3> H		sapi	ens											
<22	n>														
	1> S	ITE													
	2> ( 3> X		qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
					•				-		Ī				
	0> 9 Gly		Asn	Tyr	Tyr	Tyr	Lys	Tyr	Ser	Asn	Glu	Gly	Asp	Ser	His
1	_			5	_	-	-	-	10					15	
Leu	Gly	Gly	Gly 20	Ser	Arg	Glu	Gly	Ser 25	Phe	Lys	Glu	Thr	Ile 30	Thr	Leu
Lys	Trp	Cys 35	Thr	Pro	Arg	Thr	Asn 40	Asn	Ile	Glu	Leu	His 45	туг	Cys	Thr
Gly	Ala 50	Tyr	Arg	Ile	Ser	Pro 55	Val	Asp	Val	Asn	Ser 60	Arg	Pro	Ser	Ser
Сув 65	Leu	Thr	Asn	Phe	Leu 70	Leu	Asn	Gly	Arg	Ser 75	Val	Leu	Leu	Glu	Gln 80
Pro	Arg	Lys	Ser	Gly 85	Ser	Lys	Val	Ile	Ser 90	His	Met	Leu	Ser	Ser 95	His
Gly	Gly	Glu	Ile 100	Phe	Leu	His	Val	Leu 105	Ser	Ser	Ser	Arg	Ser 110	Ile	Leu
Glu	Xaa	Pro 115	Pro	Ser	Ile	Ser	Glu 120	Gly	Cys	Gly	Gly	Arg 125	Val	Thr	Asp
Tyr	Arg 130	Ile	Thr	Asp	Phe	Gly 135	Glu	Phe	Met	Arg	Glu 140	Asn	Arg	Leu	Thr
Pro 145	Phe	Leu	Asp	Pro	Arg 150	Tyr	Lys	Ile	Asp	Gly 155	Ser	Leu	Glu	Val	Pro 160
Leu	Glu	Arg	Ala	Lys 165	Asp	Gln	Leu	Glu	Lys 170	His	Thr	Arg	Tyr	Trp 175	Pro
Met	Asp	His	Phe	Thr	Asn	His	His	Phe							

185

<210> 950

180

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (161)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 950

Pro Arg Arg Pro His Arg Ser Cys Asp Met Pro Ala Ser Gly Glu Pro 1 5 10 15

Leu Gly Cys Thr Pro Leu Leu Pro Asn Asp Ser Gly His Pro Ser Glu 20 25 30

Leu Gly Gly Thr Arg Arg Ala Gly Asn Gly Ala Leu Gly Gly Pro Lys
35 40 45

Ala His Arg Lys Leu Gln Thr His Pro Ser Leu Ala Ser Gln Gly Ser 50 60

Lys Lys Ser Lys Ser Ser Ser Lys Ser Thr Thr Ser Gln Ile Pro Leu 65 70 75 80

Gln Ala Gln Glu Asp Cys Cys Val His Cys Ile Leu Ser Cys Leu Phe 85 90 95

Cys Glu Phe Leu Thr Leu Cys Asn Ile Val Leu Asp Cys Ala Thr Cys 100 105 110

Gly Ser Cys Ser Ser Glu Asp Ser Cys Leu Cys Cys Cys Cys Cys Gly
115 120 125

Ser Gly Glu Cys Ala Asp Cys Asp Leu Pro Cys Asp Leu Asp Cys Gly 130 135 140

Xaa Cys Cys Gly Leu Cys Phe Ser Ser 165

<210> 951

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

PCT/US00/05882

	2> ( 3> X	•	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	1> s 2> (	234)													
			qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	acio	ds
	0> 9 Ser		Glu	Thr 5	Gly	Arg	Val	Pro	Glu 10		Asp	Thr	Lys	Arg 15	Met
Gln	Val	Cys	Leu 20	Leu	Ser	Ala	Met	Pro 25	Leu	Pro	Val	Ala	Leu 30	Gln	Thr
Arg	Leu	Ala 35	Lys	Arg	Gly	Ile	Leu 40	Lys	His	Leu	Glu	Pro 45	Glu	Pro	Glu
Glu	Glu 50	Ile	Ile	Ala	Glu	Asp 55	Tyr	Asp	Asp	Asp	Pro 60	Val	Asp	туг	Glu
Ala 65	Thr	Arg	Leu	Glu	Gly 70	Leu	Pro	Pro	Ser	Trp 75	Tyr	Lys	Val	Phe	Asp 80
Pro	Ser	Cys	Gly	Leu 85	Pro	Tyr	Tyr	Trp	Asn 90	Ala	Asp	Thr	Asp	Leu 95	Val
Ser	Trp	Leu	Ser 100	Pro	His	Asp	Pro	Asn 105	Ser	Val	Val	Thr	Lys 110	Ser	Ala
Lys	Lys	Leu 115	Arg	Ser	Ser	Asn	Ala 120	Asp	Ala	Glu	Glu	Lys 125	Leu	Asp	Arg
Ser	His 130	Asp	Lys	Ser	Asp	Arg 135	Gly	His	Asp	Lys	Ser 140	Asp	Arg	Ser	His
145	-		Asp		150		-	-		155					160
Xaa	Asp	Arg	Asp	Arg 165	Glu	Arg	Gly	Tyr	Asp 170	Lys	Val	Asp	Arg	Glu 175	Arg
Glu	Arg	Asp	Arg 180	Glu	Arg	Asp	Arg	Asp 185	Arg	Gly	Tyr	Asp	Lys 190	Ala	Asp
Arg	Glu	Glu 195	Gly	Lys	Glu	Arg	Arg 200	His	His	Arg	Arg	Glu 205	Glu	Leu	Ala
Pro	Tyr 210	Pro	Lys	Ser	Lys	Lys 215	Ala	Val	Ser	Arg	Lys 220	Asp	Glu	Glu	Leu

Asp Pro Met Asp Pro Ser Ser Tyr Ser Xaa Arg Pro Arg Gly Thr Trp 225 230 235 240

Ser Thr Gly Leu Pro Lys Arg Asn Glu Ala Lys Thr Gly Ala Asp Thr 245 250 255

Thr Ala Ala Gly Pro Leu Phe Gln Gln Arg Pro Tyr Pro Ser Pro Gly 260 265 270

Ala Val Leu Arg Ala Asn Ala Glu Ala Ser Arg Thr Lys Gln Gln Asp 275 280 285

<210> 952

WO 00/55350

<211> 323

<212> PRT

<213> Homo sapiens

<400> 952

Val Gly Gly Val Leu Pro Gly Trp Lys Leu Arg Pro Arg Ser Asp Gly
1 5 10 15

Gly Leu Ser Glu Asp Gly Pro Gly Arg Asp His Gly Gly Gly Ser Arg 20 25 30

Gly Gly Arg Gly Gly Ala Ala Gly Gly Arg Gly Gly Cys Gly Pro Gln
35 40 45

Gly Ala Val Gly Gly Met Ala Arg Ala Ser Ser Gly Asn Gly Ser 50 55 60

Glu Glu Ala Trp Gly Ala Leu Arg Ala Pro Gln Gln Gln Leu Arg Glu 65 70 75 80

Leu Cys Pro Gly Val Asn Asn Gln Pro Tyr Leu Cys Glu Ser Gly His
85 90 95

Cys Cys Gly Glu Thr Gly Cys Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp
100 105 110

Phe Trp Leu Leu Trp Thr Val Leu Ile Leu Phe Ser Cys Cys Cys Ala 115 120 125

Phe Arg His Arg Arg Ala Lys Leu Arg Leu Gln Gln Gln Arg Gln 130 135 140

Arg Glu Ile Asn Leu Leu Ala Tyr His Gly Ala Cys His Gly Ala Gly

911

145 150 -155 160 Pro Phe Pro Thr Gly Ser Leu Leu Asp Leu Arg Phe Leu Ser Thr Phe 165 Lys Pro Pro Ala Tyr Glu Asp Val Val His Arg Pro Gly Thr Pro Pro 185 Pro Pro Tyr Thr Val Ala Pro Gly Arg Pro Leu Thr Ala Ser Ser Glu 195 200 205 Gln Thr Cys Cys Ser Ser Ser Ser Cys Pro Ala His Phe Glu Gly 215 Thr Asn Val Glu Gly Val Ser Ser His Gln Ser Ala Pro Pro His Gln 230 235 Glu Gly Glu Pro Gly Ala Gly Val Thr Pro Ala Ser Thr Pro Pro Ser 245 250 Cys Arg Tyr Arg Arg Leu Thr Gly Asp Ser Gly Ile Glu Leu Cys Pro 265 Cys Pro Ala Ser Gly Glu Gly Glu Pro Val Lys Glu Val Arg Val Ser 280 Ala Thr Leu Pro Asp Leu Glu Asp Tyr Ser Pro Cys Ala Leu Pro Pro 290 295 300 Glu Ser Val Pro Gln Ile Phe Pro Met Gly Leu Ser Ser Glu Gly 305 310 315 Asp Ile Pro <210> 953 <211> 433 <212> PRT <213> Homo sapiens <400> 953 Ala Lys Met Ser Val Asn Val Asn Arg Ser Val Ser Asp Gln Phe Tyr Arg Tyr Lys Met Pro Arg Leu Ile Ala Lys Val Glu Gly Lys Gly Asn 20 25 Gly Ile Lys Thr Val Ile Val Asn Met Val Asp Val Ala Lys Ala Leu

40

Asn	Arg 50	Pro	Pro	Thr	Tyr	Pro 55	Thr	Lys	Tyr	Phe	60	Cys	GIu	Leu	GIĀ
Ala 65	Gln	Thr	Gln	Phe	Asp 70	Val	Lys	Asn	Asp	Arg 75	Tyr	Ile	Val	Asn	Gly 80
Ser	His	Glu	Ala	Asn 85	Lys	Leu	Gln	Asp	Met 90	Leu	Asp	Gly	Phe	Ile 95	Lys
Lys	Phe	Val	Leu 100	Cys	Pro	Glu	Суз	Glu 105	Asn	Pro	Glu	Thr	Asp 110	Leu	His
Val	Asn	Pro 115	Lys	Lys	Gln	Thr	Ile 120	Gly	Asn	Ser	Cys	Lys 125	Ala	Cys	Gly
Tyr	Arg 130	Gly	Met	Leu	Asp	Thr 135	His	His	Lys	Leu -	Cys 140	Thr	Phe	Ile	Leu
145					150					155		Lys			160
				165					170			Gly		175	
			180					185				Glu	190		
		195					200					Trp 205			
	210					215					220	Ile			
225	-				230					235		Thr			240
_				245					250			Lys		255	
			260				•	265				Ala	270		
		275					280					Val 285			
	290					295					300	His Leu			
305	cys	urs	VOII	Vali	310	272	vra	3111	ary	315	4eu	ساب	****	Y	320

913

Glu Cys Val Val Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro 325 330 335

His Ile Leu Lys Glu Met Tyr Asp Ala Asp Leu Leu Glu Glu Val
340 345 350

Ile Ile Ser Trp Ser Glu Lys Ala Ser Lys Lys Tyr Val Ser Lys Glu 355 360 365

Leu Ala Lys Glu Ile Arg Val Lys Ala Glu Pro Phe Ile Lys Trp Leu 370 375 380

Lys Glu Ala Glu Glu Glu Ser Ser Gly Gly Glu Glu Glu Asp Glu Asp 385 390 395 400

Glu Asn Ile Glu Val Val Tyr Ser Lys Ala Ala Ser Val Pro Lys Val 405 410 415

Glu Thr Val Lys Ser Asp Asn Lys Asp Asp Asp Ile Asp Ile Asp Ala
420 425 430

Ile

<210> 954

<211> 428

<212> PRT

<213> Homo sapiens

<400> 954

Gly Tyr Gln Ile Gly Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala 1 5 10 15

Leu Ala Gly Ser Gly Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg
20 25 30

Arg Gly Ala Tyr Glu Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro 35 40 45

Pro Pro Leu Asp Arg Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr 50 55 60

Phe Ala Gly Lys Met His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe 65 70 75 80

Pro Pro Trp Asp Arg Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro 85 90 95

Pro	Leu	His	Glu 100	His	Pro	Leu	Tyr	Lys 105	Asp	Gln	Ala	Cys	Туг 110	Ile	Phe
His	His	Arg 115	Cys	Arg	Leu	Leu	Glu 120	Gly	Val	Lys	Gln	Ala 125	Leu	Trp	Leu
Thr	Lys 130	Thr	Lys	Leu	Ile	Glu 135	Gly	Leu	Pro	Glu	Lys 140	Val	Leu	Ser	Leu
Val 145	Asp	Asp	Pro	Arg	Asn 150	His	Ile	Glu	Asn	Gln 155	Asp	Glu	Суз	Val	Leu 160
Asn	Val	Ile	Ser	His 165	Ala	Arg	Leu	Trp	Gln 170	Thr	Thr	Glu	Glu	Ile 175	Pro
Lys	Arg	Glu	Thr 180	Tyr	Cys	Pro	Val	Ile 185	Val	Asp	Asn	Leu	Ile 190	Gln	Leu
Cys	Lys	Ser 195	Gln	Ile	Leu	Lys	His 200	Pro	Ser	Leu	Ala	Arg 205	Arg	Ile	Cys
Val	Gln 210	Asn	Ser	Thr	Phe	Ser 215	Ala	Thr	Trp	Asn	Arg 220	Glu	Ser	Leu	Leu
Leu 225	Gln	Val	Arg	Gly	Ser 230	Gly	Gly	Ala	Arg	Leu 235	Ser	Thr	Lys	Asp	Pro 240
Leu	Pro	Thr	Ile	Ala 245	Ser	Arg	Glu	Glu	Ile 250	Glu	Ala	Thr	Lys	Asn 255	His
Val	Leu	Glu	Thr 260	Phe	Tyr	Pro	Ile	Ser 265	Pro	Ilė	Ile	Asp	Leu 270	His	Glu
Cys	Asn	11e 275	Tyr	Asp	Val	Lys	Asn 280	Asp	Thr	Gly	Phe	Gln 285	Glu	Gly	Tyr
Pro	Туг 290	Pro	Tyr	Pro	His	Thr 295	Leu	Tyr	Leu	Leu	Asp 300	Lys	Ala	Asn	Leu
Arg 305	Pro	His	Arg	Leu	Gln 310	Pro	Asp	Gln	Leu	Arg 315	Ala	Lys	Met	Ile	Leu 320
Phe	Ala	Phe	Gly	Ser 325	Ala	Leu	Ala	Gln	Ala 330	Arg	Leu	Leu	Tyr	Gly 335	Asn
Asp	Ala	Lys	Val 340	Leu	Glu	Gln	Pro	Val 345	Val	Val	Gln	Ser	Val 350	Gly	Thr
Asp	Gly	Arg 355	Val	Phe	His	Phe	Leu 360	Val	Phe	Gln	Leu	Asn 365	Thr	Thr	Asp

Leu Asp Ser Asn Glu Gly Val Lys Asn Leu Ala Trp Val Asp Ser Asp 375 Gln Leu Leu Tyr Gln His Phe Trp Cys Leu Pro Val Ile Lys Lys Arg 395 390 Val Val Val Glu Pro Val Gly Pro Val Gly Phe Lys Pro Glu Thr Phe 410 405 Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala 420 425 <210> 955 <211> 169 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids <400> 955 Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Glu Pro Gly 5 Asp Arg Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg 20 25 Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys 40

Phe Asp Glu Asn Leu Asn Tyr Pr Glu Gln Lys Val Val Thr Val Gly

Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr

Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp

55

916

85 90 95

Gln Phe Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly 100 105 110

Asp Met Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Ile 115 120 125

Leu Ile Xaa Gly His Thr His Lys Phe Glu Ala Xaa Glu His Glu Asn 130 135 140

Lys Phe Tyr Ile Asn Pro Gly Ser Ala Thr Gly Ala Tyr Asn Ala Leu 145 150 155 160

Glu Thr Asn Ile Ile Xaa Ser Leu Cys 165

<210> 956

<211> 39

<212> PRT

<213> Homo sapiens

<400> 956

Ser Pro Tyr Cys Gly Leu Gln Val Met Leu Phe Leu Leu His His Thr 1 5 10 15

Leu Trp Cys Leu Leu Pro Cys Ala Ser Ser Leu Arg Leu Ile Lys Lys
20 25 30

Val Ser Arg Leu Leu Gln Leu 35

<210> 957

<211> 219

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

917

<400> 957 Gln Gly His Cys Gly Cys Xaa Leu Xaa Ser Leu Leu Ala Asn Gly His 5 Asp Leu Ala Ala Ala Met Ala Val Asp Lys Ser Asn Pro Thr Ser Lys His Lys Ser Gly Ala Val Ala Ser Leu Leu Ser Lys Ala Glu Arg Ala Thr Glu Leu Ala Ala Glu Gly Gln Leu Thr Leu Gln Gln Phe Ala Gln Ser Thr Glu Met Leu Lys Arg Val Val Gln Glu His Leu Pro Leu Met Ser Glu Ala Gly Ala Gly Leu Pro Asp Met Glu Ala Val Ala Gly Ala Glu Ala Leu Asn Gly Gln Ser Asp Phe Pro Tyr Leu Gly Ala Phe Pro 105 Ile Asn Pro Gly Leu Phe Ile Met Thr Pro Ala Gly Val Phe Leu Ala 115 120 Glu Ser Ala Leu His Met Ala Gly Leu Ala Glu Tyr Pro Met Gln Gly 135 Glu Leu Ala Ser Ala Ile Ser Ser Gly Lys Lys Lys Arg Lys Arg Cys 145 155 150 Gly Met Cys Ala Pro Cys Arg Arg Ile Asn Cys Glu Gln Cys Ser 165 Ser Cys Arg Asn Arg Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys 185

Cys Glu Glu Leu Lys Lys Pro Ser Ala Ala Leu Glu Lys Val Met

200

Leu Pro Thr Gly Ala Ala Phe Arg Trp Phe Gln 210 215

<210> 958

<211> 259

<212> PRT

<213> Homo sapiens

195

<220>

918

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 958

Leu Pro Gln Asn Ala Val Leu Glu Ala Asp Phe Ala Lys Arg Gly Tyr
1 5 10 15

Lys Leu Pro Lys Xaa Arg Lys Thr Gly Thr Thr Ile Ala Gly Val Val 20 25 30

Tyr Lys Asp Gly Ile Val Leu Gly Ala Asp Thr Arg Ala Thr Glu Gly
35 40 45

Met Val Val Ala Asp Lys Asn Cys Ser Lys Ile His Phe Ile Ser Pro 50 55 60

Asn Ile Tyr Cys Cys Gly Ala Gly Thr Xaa Ala Asp Thr Asp Met Thr 65 70 75 80

Thr Gln Leu Ile Ser Ser Asn Leu Glu Leu His Ser Leu Ser Thr Gly
85 90 95

Arg Leu Pro Arg Val Val Thr Ala Asn Arg Met Leu Lys Gln Met Leu 100 105 110

Phe Arg Tyr Gln Gly Tyr Ile Gly Ala Ala Leu Val Leu Gly Gly Val 115 120 125

Asp Val Thr Gly Pro His Leu Tyr Ser Ile Tyr Pro His Gly Ser Thr 130 135 140

Asp Lys Leu Pro Tyr Val Thr Met Gly Ser Gly Ser Leu Ala Ala Met 145 150 155 160

Ala Val Phe Glu Asp Lys Phe Arg Pro Asp Met Glu Glu Glu Glu Ala 165 170 175

Lys Asn Leu Val Ser Glu Ala Ile Ala Ala Gly Ile Phe Asn Asp Leu 180 185 190

Gly Ser Gly Ser Asn Ile Asp Leu Cys Val Ile Ser Lys Asn Lys Leu 195 200 205

Asp Phe Leu Arg Pro Tyr Thr Val Pro Asn Lys Lys Gly Thr Arg Leu 210 215 220

919

Gly Arg Tyr Arg Cys Glu Lys Gly Thr Thr Ala Val Leu Thr Glu Lys 225 230 235 240

Ile Thr Pro Leu Glu Ile Glu Val Leu Glu Glu Thr Val Gln Thr Met
245 250 255

Asp Thr Ser

<210> 959

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 959

Phe Trp Ser Ala Ala Lys Phe Asp Phe Thr Ser His Thr Pro Phe Leu
1 5 10 15

Pro Leu Glu Met Gln Phe Arg Gln Arg Pro Cys Gly Glu Ser Cys Asn 20 25 30

Ile Lys Phe Xaa Phe Arg Arg Ser Xaa Pro Gln Thr Ser Glu Pro Leu 35 40 45

Ala Val Leu Pro Xaa Asn Lys Asn Glu Leu Glu Lys Lys Val Ala Gln 50 55 60

Leu Gln Arg Ser Lys Ser Ser Tyr Phe Pro Thr
65 70 75

920

<211> 128 <212> PRT

<213> Homo sapiens

<400> 960

Gln Ser Arg Gly Leu Arg Leu Leu Gly Pro Gly Asp Gly Ala Gly Met

1 5 10 15

Thr Pro Gly Val Val His Ala Ser Pro Pro Gln Ser Gln Arg Val Pro 20 25 30

Arg Gln Ala Pro Cys Glu Trp Ala Ile Arg Asn Ile Gly Gln Lys Pro 35 40 45

Lys Glu Pro Asn Cys His Asn Cys Gly Thr His Ile Gly Leu Arg Ser 50 55 60

Lys Thr Leu Arg Gly Thr Pro Asn Tyr Leu Pro Ile Arg Gln Asp Thr 65 70 75 80

His Pro Pro Ser Val Ile Phe Cys Leu Ala Gly Val Gly Val Pro Gly 85 90 95

Gly Thr Cys Arg Pro Ala Pro Cys Val Pro Arg Phe Ala Ala Leu Pro 100 105 110

Trp Ala Thr Asn His Pro Gly Pro Gly Cys Leu Ser Asp Leu Arg Ala 115 120 125

<210> 961

<211> 564

<212> PRT

<213> Homo sapiens

<400> 961

Lys Met Lys Ser Val Lys Ile Ala Phe Ala Val Thr Leu Glu Thr Val 1 5 10 15

Leu Ala Gly His Glu Asn Trp Val Asn Ala Val His Trp Gln Pro Val 20 25 30

Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro Val Arg Leu Leu Ser Ala 35 40 45

Ser Met Asp Lys Thr Met Ile Leu Trp Ala Pro Asp Glu Glu Ser Gly
50 55 60

Val 65	Trp	Leu	Glu	Gln	Val 70	Arg	Val	Gly	Glu	Val 75	Gly	Gly	Asn	Thr	Lei 8
Gly	Phe	туг	Asp	Суs 85	Gln	Phe	Asn	Glu	Asp 90	Gly	Ser	Met	Ile	Ile 95	Ala
His	Ala	Phe	His 100	Gly	Ala	Leu	His	Leu 105	Trp	Lys	Gln	Asn	Thr 110	Val	Ası
Pro	Arg	Glu 115	Trp	Thr	Pro	Glu	11e 120	Val	Ile	Ser	Gly	His 125	Phe	Asp	Gl
Val	Gln 130	Asp	Leu	Val	Trp	Asp 135	Pro	Glu	Gly	Glu	Phe 140	Ile	Ile	Thr	Va:
Gly 145	Thr	Asp	Gln	Thr	Thr 150	Arg	Leu	Phe	Ala	Pro 155	Trp	Lys	Arg	Lys	As <sub>l</sub>
				165	-				Ala 170					175	
			180					185	Asn				190		
-		195					200		Phe			205			
	210					215			Gln		220				
225					230				Gly	235					240
				245					Gly 250					255	
	_		260					265	Thr				270		
		275					280		Glu			285		_	
	290					295			val		300				
305	-				310				Asn	315					320
Ala	Ser	Ala	Cys	Lys 325	Ala	Ala	Lys	Lys	Glu 330	His	ALA	ATA	тте	335	Let

WO 00/55350

922

PCT/US00/05882

	Trp	Asn	Thr	340	ser	Trp	Lys	GIn	Val 345	Gln	Asn	Leu	Val	350	HIS	Ser
	Leu	Thr	Val 355	Thr	Gln	Met	Ala	Phe 360	Ser	Pro	Asn	Glu	Lys 365	Phe	Leu	Leu
	Ala	Val 370	Ser	Arg	Asp	Arg	Thr 375	Trp	Ser	Leu	Trp	Lys 380	Lys	Gln	Asp	Thr
	Ile 385	Ser	Pro	Glu	Phe	Glu 390	Pro	<b>V</b> al	Phe	Ser	Leu 395	Phe	Ala	Phe	Thr	Asn 400
	Lys	Ile	Thr	Ser	Val 405	His	Ser	Arg	Ile	Ile 410	Trp	Ser	Cys	Asp	Trp 415	Ser
	Pro	Asp	Ser	Lys 420	Tyr	Phe	Phe	Thr	Gly 425	Ser	Arg	Asp	Lys	Lys 430	Val	Val
	Val	Trp	Gly 435	Glu	Cys	Asp	Ser	Thr 440	Asp	Asp	Cys	Ile	Glu 445	His	Asn	Ile
	Gly	Pro 450	Cys	Ser	Ser	Val	Leu 455	Asp	Val	Gly	Gly	Ala- 460	Val	Thr	Ala	Val
	Ser 465	Val	Cys	Pro	Val	Leu 470	His	Pro	Ser	Gln	Arg 475	Tyr	Val	Val	Ala	Val 480
•	Gly <sup>°</sup>	Leu	Glu	Суз	Gly 485	Lys	Ile	Cys	Leu	Tyr 490	Thr	Trp	Lys	Lys	Thr 495	Asp
•	Gln	Val	Pro	Glu 500	Ile	Asn	Asp	Trp	Thr 505	His	Суз	Val	Glu	Thr 510	Ser	Gln
	Ser	Gln	Ser	His	Thr		Ala		-	Lys	Leu	Cys	Trp	Lys	Asn	Суз

Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu Gly Ala Glu Trp Leu His

Phe Ala Ser Cys Gly Glu Asp His Thr Val Lys Ile His Arg Val Asn

540

555

535

550

Lys Cys Ala Leu

530

<210> 962

<211> 43

545

<212> PRT

923

<213> Homo sapiens

<400> 962

Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His 1 5 10 15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu 20 25 30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe
35 40

<210> 963

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 963

Glu Ser Arg Val Asp Pro Arg Val Arg Glu Arg Ser Ala Arg Thr Ala 1 5 10 15

Gly Ala Thr Val Gly Pro Ala Ala Val Met Ser Val Leu Arg Pro Leu 20 25 30

Asp Lys Leu Pro Gly Leu Asn Thr Ala Thr Ile Leu Leu Val Gly Thr 35 40 45

Glu Asp Ala Leu Leu Gln Gln Leu Ala Asp Ser Met Leu Lys Glu Asp 50 55 60

Cys Ala Ser Glu Leu Lys Val His Leu Ala Lys Ser Leu Pro Leu Pro 65 70 75 80

Ser Ser Val Asn Arg Pro Arg Ile Asp Leu Ile Val Phe Val Val Asn 85 90 95

Leu His Ser Lys Tyr Ser Leu Gln Asn Thr Glu Glu Ser Leu Arg His 100 105 110

Val Asp Ala Ser Phe Phe Leu Gly Lys Val Cys Phe Leu Ala Thr Gly 115 120 125

Gly Gly Xaa Leu

<210> 964 <211> 175 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <400> 964 His Glu Arg Ser Cys Cys Asp Ala Arg Ser Glu Ala Xaa Gln Gly Arg 5 Gly Arg Val Gly Ala Gly Ala Gly Ala Trp Ser Ser Cys Gly Val 20 Ser Gly Pro Gly Arg Gly Met Gly Val Leu Ala Ala Ala Ala Arg Cys Leu Val Arg Gly Ala Asp Arg Met Ser Lys Trp Thr Ser Lys Arg Gly 55 Pro Arg Ser Phe Arg Gly Arg Xaa Gly Arg Gly Ala Lys Gly Ile Gly 65 70 Phe Leu Thr Ser Gly Trp Arg Phe Val Gln Ile Lys Glu Met Val Pro Glu Phe Val Val Pro Asp Leu Thr Gly Phe Lys Leu Lys Pro Tyr Val 100 105 Ser Tyr Leu Ala Pro Glu Ser Glu Glu Thr Pro Leu Thr Ala Ala Gln 115 120 Leu Phe Ser Glu Ala Val Ala Pro Ala Ile Glu Lys Asp Phe Lys Asp 135 Gly Thr Phe Asp Pro Asp Asn Leu Glu Lys Tyr Gly Phe Glu Pro Thr 145 150 155 160 Gln Glu Gly Lys Leu Phe Gln Leu Tyr Pro Arg Asn Phe Leu Arg 165 175

<21	0> 9 1> 3	63													
	2> P: 3> H		sapi	ens											
<22	1> s 2> (	356)	qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 9														
Leu 1	Leu	Arg	Arg	Leu 5	Arg	Thr	Ala	Val	Pro 10	Gly -	Ser	Leu	Glu	Ala 15	Glr
Lys	Arg	Lys	Pro 20	Ser	Pro	Gly	Pro	Gly 25	Ser	Leu	Asp	Leu	Val 30	Ser	Leu
Gly	Ser	Gly 35	Asn	Ser	Gly	Ser	Gln 40	Arg	Thr	Val	Leu	Ile 45	Met	Asp	Lys
Gln	Asn 50	Ser	Gln	Met	Asn	Ala 55	Ser	His	Pro	Glu	Thr 60	Asn	Leu	Pro	Val
Gly 65	Tyr	Pro	Pro	Gln	Tyr 70	Pro	Pro	Thr	Ala	Phe 75	Gln	Gly	Pro	Pro	Gly 80
Tyr	Ser	Gly	Tyr	Pro 85		Pro	Gln	Val	Ser 90	Tyr	Pro	Pro	Pro	Pro 95	Ala
Gly	His	Ser	Gly 100	Pro	Gly	Pro	Ala	Gly 105	Phe	Pro	Val	Pro	Asn 110	Gln	Pro
Val	Tyr	Asn 115	Gln	Pro	Val	туг	Asn 120	Gln	Pro	Val	Gly	Ala 125	Ala	Gly	Val
Pro	Trp 130	Met	Pro	Ala	Pro	Gln 135	Pro	Pro	Leu	Asn	Cys 140	Pro	Pro	Gly	Leu
Glu 145	Tyr	Leu	Ser	Gln	Ile 150	Asp	Gln	Ile	Leu	Ile 155	His	Gln	Gln	Ile	Glu 160
Leu	Leu	Glu	Val	Leu 165	Thr	Gly	Phe	Glu	Thr 170	Asn	Asn	Lys	Tyr	Glu 175	Ile
Lys	Asn	Ser	Phe 180	Gly	Gln	Arg	Val	туг 185	Phe	Ala	Ala	Glu	Asp 190	Thr	Asp
Cve	Cve	Thr	Ara	Aen	Cve	Cvq	Glv	Pro	Ser	Ara	Pro	Phe	Thr	Leu	Ara

926

195 20.0 205 Ile Ile Asp Asn Met Gly Gln Glu Val Ile Thr Leu Glu Arg Pro Leu 220 215 Arg Cys Ser Ser Cys Cys Cys Pro Cys Cys Leu Gln Glu Ile Glu Ile 235 230 Gln Ala Pro Pro Gly Val Pro Ile Gly Tyr Val Ile Gln Thr Trp His 245 250 Pro Cys Leu Pro Lys Phe Thr Ile Gln Asn Glu Lys Arg Glu Asp Val 265 Leu Lys Ile Ser Gly Pro Cys Val Val Cys Ser Cys Cys Gly Asp Val Asp Phe Glu Ile Lys Ser Leu Asp Glu Gln Cys Val Val Gly Lys Ile 290 295 Ser Lys His Trp Thr Gly Ile Leu Arg Glu Ala Phe Thr Asp Ala Asp 310 315 Asn Phe Gly Ile Gln Phe Pro Leu Asp Leu Asp Val Lys Met Lys Ala 330 325 Val Met Ile Gly Ala Cys Phe Leu Ile Asp Phe Met Phe Glu Ser 340 Thr Gly Ser Xaa Glu Gln Lys Ser Gly Val Trp . 355 360 <210> 966 <211> 131 <212> PRT <213> Homo sapiens Ala Glu Val His Thr Arg Lys Gln Gly Pro Glu Ala Glu Pro Ala Ala Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro 35 40 Cys Gly Phe Glu Ala Thr Tyr L u Glu Leu Ala Ser Ala Val Lys Glu

55

Gin Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala 75 65 70 Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn 90 Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala 105 Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys 120 Val Ile Leu 130 <210> 967 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (306) <223> Xaa equals any of the naturally occurring L-amino acids <400> 967 Pro Thr Pro Ala Ser His Ser Pro Ser Pro Ser Leu Pro Ala Leu Pro Pro Ser Pro Pro His Arg Pro Asp Ser Pro Leu Phe Asn Ser Arg Cys 25 20 Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Leu Glu Glu Leu Pro Arg 40 Ala Glu Gly Ala Ala Val Ala Gly Gly Pro Gly Ser Ser Ala Gly Pro Pro Pro Pro Xaa Ala Glu Ala Ala Glu Pro Glu Ala Arg Leu Ala Glu

70

85

Val Thr Glu Ser Ser Asn Gln Asp Ala Leu Ser Gly Ser Ser Asp Leu

90

rea	GIU	Dea	100		GIN	GIU	wab	105		361	Gly	1111	110	Set	NI.
Ala	Ser	Gly 115		Leu	Gly	Ser	Gly 120	Leu	Gly	Ser	Gly	Ser 125	Gly	Ser	Gl
Ser	His 130	Glu	Gly	Gly	Ser	Thr 135		Ala	Ser	Ile	Thr 140	Arg	Ser	Ser	Glr
Ser 145	Ser	His	Thr	Ser	Lys 150	Tyr	Phe	Gly	Ser	Ile 155	Asp	Ser	Ser	Glu	Ala 160
Glu	Ala	Gly	Ala	Ala 165	Arg	Gly	Gly	Ala	Glu 170	Pro	Gly	Asp	Gln	Val 175	Ile
Lys	Tyr	Val	Leu 180	Gln	Asp	Pro	Ile	Trp 185	Leu	Leu	Met	Ala	Asn 190	Ala	Asp
Gln	Arg	Val 195	Met	Met	Thr	Tyr	Gln 200	Val	Pro	Ser	Arg	Asp 205	Met	Thr	Ser
Val	Leu 210	Lys	Gln	Asp	Arg	Glu 215	Arg	Leu	Arg	Ala	Met 220	Gln	Lys	Gln	Glr
Pro 225	_	Phe	Ser	Glu	Asp 230	Gln	Arg	Arg	Glu	Leu 235	Gly	Ala	Val	His	Ser 240
Trp	Val	Arg	Lys	Gly 245	Gĺn	Leu	Pro	Arg	Ala 250	Leu	Asp	Val		Ala 255	Cys
Val	Asp	Cys	Gly 260	Ser	Ser	Thr	Gln	Asp 265	Pro	Gly	His	Pro	Asp 270	Asp	Pro
		275			Asp	_	280					285			
	290			_	Ser	295	-	_	_		300				
305					Gly 310					315					320
				325	Glu			Arg	330	Ser	Ser	Ser	Pro	Ala 335	Leu
Pro	Thr	Ala	Gly	Asn	Cys	Thr	Ser								

PCT/US00/05882

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<210> 968
<211> 67
<212> PRT
<213> Homo sapiens
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WO 00/55350

<400> 968

Arg Cys Ser Ser Phe Phe Leu Ser Leu Leu Val Lys Ile Thr Asn Ile

Trp Glu Gly Phe Lys Asp Ala Cys Tyr Gly Ala Asn Val Leu Ser Leu 25

Leu Asn Ser Arg Ser Glu Leu Leu Thr Cys Ile Gln Asn Ile Asn Ala 40

Gln Asn Leu Tyr Met Ser Pro Ile Arg Lys Ile His Trp His Ala Thr 50

Gly Asp Ser 65

<210> 969 <211> 325 <212> PRT <213> Homo sapiens

<400> 969

Leu Asn Leu Arg Ser Pro His Ile Cys Phe Arg Ser Ser Lys Pro Ser

Trp Ala Asp Gln Val Glu Glu Glu Gly Glu Asp Asp Lys Cys Val Thr

Ser Glu Leu Lys Gly Ile Pro Leu Ala Thr Gly Asp Thr Ser Pro 35

Glu Pro Glu Leu Pro Gly Ala Pro Leu Pro Pro Pro Lys Glu Val 55

Ile Asn Gly Asn Ile Lys Thr Val Thr Glu Tyr Lys Ile Asp Glu. Asp 70 75

Gly Lys Lys Phe Lys Ile Val Arg Thr Phe Arg Ile Glu Thr Arg Lys

Ala Ser Lys Ala Val Ala Arg Arg Lys Asn Trp Lys Lys Phe Gly Asn 105 100

Ser Glu Phe Asp Pro Pro Gly Pro Asn Val Ala Thr Thr Val Ser

125 115 120 Asp Asp Val Ser Met Thr Phe Ile Thr Ser Lys Glu Asp Leu Asn Cys 135 Gln Glu Glu Asp Pro Met Asn Lys Leu Lys Gly Gln Lys Ile Val 155 150 Ser Cys Arg Ile Cys Lys Gly Asp His Trp Thr Thr Arg Cys Pro Tyr 165 170 Lys Asp Thr Leu Gly Pro Met Gln Lys Glu Leu Ala Glu Gln Leu Gly 185 Leu Ser Thr Gly Glu Lys Glu Lys Leu Pro Gly Glu Leu Glu Pro Val 200 Gln Ala Thr Gln Asn Lys Thr Gly Lys Tyr Val Pro Pro Ser Leu Arg 220 210 215 Asp Gly Ala Ser Arg Arg Gly Glu Ser Met Gln Pro Asn Arg Arg Ala 230 235 Asp Asp Asn Ala Thr Ile Arg Val Thr Asn Leu Ser Glu Asp Thr Arg 250 245 Glu Thr Asp Leu Gln Glu Leu Phe Arg Pro Phe Gly Ser Ile Ser Arg 270 260 265 Ile Tyr Leu Ala Lys Asp Lys Thr Thr Gly Gln Ser Lys Gly Phe Ala 280 Phe Ile Ser Phe His Arg Arg Glu Asp Ala Ala Arg Ala Ile Ala Gly 295 Val Ser Gly Phe Gly Tyr Asp His Leu Ile Leu Asn Val Glu Trp Ala 305

Lys Pro Ser Thr Asn 325

<210> 970

<211> 357

<212> PRT

<213> Homo sapiens

<400> 970

Val Arg Val Lys Met Ala Ala Ala Glu Ala Ala Asn Cys Ile Met Glu
1 5 10 15

Val Ser Cys Gly Gln Ala Glu Ser Ser Glu Lys Pro Asn Ala Glu Asp 20 Met Thr Ser Lys Asp Tyr Tyr Phe Asp Ser Tyr Ala His Phe Gly Ile 40 His Glu Glu Met Leu Lys Asp Glu Val Arg Thr Leu Thr Tyr Arg Asn Ser Met Phe His Asn Arg His Leu Phe Lys Asp Lys Val Val Leu Asp 65 70 75 Val Gly Ser Gly Thr Gly Ile Leu Cys Met Phe Ala Ala Lys Ala Gly Ala Arg Lys Val Ile Gly Ile Glu Cys Ser Ser Ile Ser Asp Tyr Ala 105 Val Lys Ile Val Lys Ala Asn Lys Leu Asp His Val Val Thr Ile Ile 115 120 125 Lys Gly Lys Val Glu Glu Val Glu Leu Pro Val Glu Lys Val Asp Ile 135 Ile Ile Ser Glu Trp Met Gly Tyr Cys Leu Phe Tyr Glu Ser Met Leu 150 155 Asn Thr Val Leu Tyr Ala Arg Asp Lys Trp Leu Ala Pro Asp Gly Leu 165 170 175 Ile Phe Pro Asp Arg Ala Thr Leu Tyr Val Thr Ala Ile Glu Asp Arg 180 185 Gln Tyr Lys Asp Tyr Lys Ile His Trp Trp Glu Asn Val Tyr Gly Phe 200 Asp Met Ser Cys Ile Lys Asp Val Ala Ile Lys Glu Pro Leu Val Asp 210 Val Val Asp Pro Lys Gln Leu Val Thr Asn Ala Cys Leu Ile Lys Glu 235 225 230 Val Asp Ile Tyr Thr Val Lys Val Glu Asp Leu Thr Phe Thr Ser Pro 250 Phe Cys Leu Gln Val Lys Arg Asn Asp Tyr Val His Ala Leu Val Ala 260 . 265 270 Tyr Phe Asn Ile Glu Phe Thr Arg Cys His Lys Arg Thr Gly Phe Ser

280

275

932

Thr Ser Pro Glu Ser Pro Tyr Thr His Trp Lys Gln Thr Val Phe Tyr 295 Met Glu Asp Tyr Leu Thr Val Lys Thr Gly Glu Glu Ile Phe Gly Thr 305 310 Ile Gly Met Arg Pro Asn Ala Lys Asn Asn Arg Asp Leu Asp Phe Thr 330 325 Ile Asp Leu Asp Phe Lys Gly Gln Leu Cys Glu Leu Ser Cys Ser Thr 345 Asp Tyr Arg Met Arg 355 <210> 971 <211> 176 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (176) <223> Xaa equals any of the naturally occurring L-amino acids <400> 971 Gly Val Pro Arg Arg Ala Tyr Gln Ala Xaa Xaa Leu Arg Arg Val Asp Asp Phe Lys Lys Ala Phe Ser Lys Glu Lys Met Glu Lys Thr Lys Val 20 Arg Thr Arg Glu Asn Leu Glu Lys Thr Arg Leu Lys Thr Lys Glu Asn 40

Leu Glu Lys Thr Arg His Thr Leu Glu Lys Arg Met Asn Lys Leu Gly

Thr Arg Leu Val Pro Ala Glu Arg Arg Glu Lys Leu Lys Thr Ser Arg 65 70 75 80

Asp Lys Leu Arg Lys Ser Phe Thr Pro Asp His Val Val Tyr Ala Arg 85 90 95

Ser Lys Thr Ala Val Tyr Lys Val Pro Pro Phe Thr Phe His Val Lys

Lys Ile Arg Glu Gly Gln Val Glu Val Leu Lys Ala Thr Glu Met Val 115 120 125

Glu Val Gly Ala Asp Asp Asp Glu Gly Gly Ala Glu Arg Gly Glu Ala 130 135 140

Gly Asp Leu Arg Arg Gly Ser Ser Pro Asp Val His Ala Leu Leu Glu 145 150 155 160

Ile Thr Glu Glu Ser Asp Ala Val Leu Val Asp Lys Ser Asp Ser Xaa 165 170 175

<210> 972

<211> 159

<212> PRT

<213> Homo sapiens

<400> 972

Gly Lys Ala Arg Arg Arg Ala Ala Lys Leu Gln Ser Ser Gln Glu Pro 1 5 10 15

Glu Ala Pro Pro Pro Arg Asp Val Ala Leu Leu Gln Gly Arg Ala Asn 20 25 30

Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile 35 40 45

Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val 50 55 60

Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe
65 70 75 80

Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu 85 90 95

Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys

100 105 110

Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe 115 120 125

Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg 130 135 140

Lys Leu Gly Leu Arg Leu Gly Tyr Ile Ile His Ser Leu Gly Thr 145 150 155

<210> 973

<211> 233

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 973

Arg Ala Xaa Lys Ala Ala Pro Arg Arg Ala Leu Ala Arg Leu Val Leu
1 5 10 15

Ala Trp Cys Arg Trp Leu Val Ser Ala Thr Cys Val Gly Thr Ala Asp 20 25 30

Arg Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala Pro Asn 35 40 45

Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp Ile Ser 50 55 60

Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu 65 70 75 80

Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg 85 90 95

Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala Ser Val 100 105 110

Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr Pro Lys Lys Gln 115 120 125

Gly Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg 130 135 140

Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser 145 150 155 160

Phe Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile Leu Arg Gln Ile 165 170 175

Thr Val Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu Thr Leu Arg 180 185 190

Leu Val Gln Ala Phe Gln Phe Thr Asp Lys His Gly Glu Val Cys Pro 195 200 205

Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile Lys Pro Asp Val Gln Lys 210 215 220

Ser Lys Glu Tyr Phe Ser Lys Gln Lys 225 230

<210> 974

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 974

Ser Trp Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly Leu Gly Gln 1 5 10 15

Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg Leu Leu Leu 20 25 30

Glu Arg Arg Thr Xaa Gly Ser Glu Val Gln Asp Ser His Ser Thr Ser 35 40 45

Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu Asn Ala Pro 50 55 60

Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro Gly Pro Gly Leu 65 70 75 80

Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro Cys Asp Phe His Leu 85 90 95

Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu Asp Thr Leu Pro Ser Ala 100 105 110

Glu Thr Ala Leu Ile Leu His Arg Lys Val Leu Thr Ala Ala Trp Arg
115 120 125

Gln Glu Leu Gly Leu Gln Leu His His Lys Pro Arg Gln Gly Ser Pro 130 135 140

Gly Gln Pro Phe Pro Trp Pro Gly Cys Gly Ile Pro Ser Ala Asn Leu 145 150 155 160

Leu Asp Val Thr Val Pro Ser Gly Leu Pro Val Gln Gln His
165 170

<210> 975

<211> 380

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 975

Arg Pro Glu Val Arg His Ser Arg Glu Ala Pro Glu Ser Arg Arg Trp
1 5 10 15

Ala Val Trp Arg Ser Leu Glu Ser Leu Pro Arg His Gln Leu Leu Cys 20 25 30

Leu Pro Val Gly Ala Pro Pro Ala Pro Ala Met Leu Ser Ala Leu Ala 35 40 45

Arg Pro Ala Ser Ala Ala Leu Arg Arg Ser Phe Ser Thr Ser Ala Gln 50 55 60

Asn Asn Ala Lys Val Ala Val Leu Gly Ala Ser Gly Gly Ile Gly Gln 65 70 75 80

Pro Leu Ser Leu Leu Lys Asn Ser Pro Leu Val Ser Arg Leu Thr
85 90 95

Leu Tyr Asp Ile Ala His Thr Pro Gly Val Ala Ala Asp Leu Ser His  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Ile Glu Thr Lys Ala Ala Val Lys Gly Tyr Leu Gly Pro Glu Gln Leu 115 126 125

Pro Asp Cys Leu Lys Xaa Cys Asp Val Val Val Ile Pro Ala Gly Val

	130			•		135					140				
Pro 145	Arg	Lys	Pro	Gly	Met 150	Thr	Arg	Asp	Asp	Leu 155	Phe	Asn	Thr	Asn	Ala 160
Thr	Ile	Val	Ala	Thr 165	Leu	Thr	Ala	Ala	Cys 170	Ala	Gln	His	Cys	Pro 175	Gli
Ala	Met	Ile	Cys 180	Val	Ile	Ala	Asn	Pro 185	Val ·	Asn	Ser	Thr	Ile 190	Pro	Ile
Thr	Ala	Glu 195	Val	Phe	Lys	Lys	His 200	Gly	Val	Tyr	Asn	Pro 205	Asn	Lys	Ile
Phe	Gly 210	Val	Thr	Thr	Leu	Asp 215	Ile	Val	Arg	Ala	Asn 220	Thr	Phe	Val	Ala
Glu 225	Leu	Lys	Gly	Leu	Asp 230	Pro	Ala	Arg	Val	Asn 235	Val	Pro	Val	Ile	Gl <sub>3</sub> 240
Gly	His	Ala	Gly	Lys 245	Thr	Ile	Ile	Pro	Leu 250	Ile	Ser	Gln	Cys	Thr 255	Pro
Lys	Val	Asp	Phe 260	Pro	Gln	Asp	Gln	Leu 265	Thr	Ala	Leu	Thr	Gly 270	Arg	Ile
Gln	Glu -	Ala 275	Gly	Thr	Glu 	val	Val 280	Lys	Ala	Lys	Ala	Gly 285	Ala	Gly	Ser
Ala	Thr 290	Leu	Ser	Met	Ala	Tyr 295	Ala	Gly	Ala	Arg	Phe 300	Val	Phe	Ser	Leu
Val 305	Asp	Ala	Met	Asn	Gly 310	Lys	G1u	Gly	Val	Val 315	Glu	Cys	Ser	Phe	Va]
Lys	Ser	Gln	Glu	Thr 325	Glu	Cys	Thr	Tyr	Phe 330	Ser	Thr	Pro	Leu	Leu 335	Let
Gly	Lys	Lys	Gly 340	Ile	Glu	Lys	Asn	Leu 345	Gly	Ile	Gly	Lys	Val 350	Ser	Ser
Phe	Glu	Glu 355	Lys	Met	Ile	Ser	<b>Азр</b> 360	Ala	Ile	Pro	Glu	Leu 365	Lys	Ala	Ser
Ile	Lys 370	Lys	Gly	Glu	Asp	Phe 375	Val	Lys	Thr	Leu	Lys 380				

<210> 976

<212> PRT															
<213> Homo sapiens															
	0> 9														
Ala	Ala	Leu	Ser	Gln	Ile	Thr	Ile	Ala	Thr	Pro	Pro	Ala	Val	Lys	Gln
1				5					10					15	
Thr	Ile	Ser		Ile	Ser	Gly	Phe		Glu	Thr	Cys	Leu	_	Trp	Arg
			20					25					30		
	-1-	•	<b></b>	• • •			<b>61</b>	<b>61</b>	M-4	<b></b>	*	Dh.	77 i -	T1.	m
ser	116		Thr	АТА	Asp	met	40	GIU	met	туг	Leu	45	піз	TIE	тгр
		35					40					45			
Glv	Gln	Ara	Tro	ጥኒታ	Gln	T.vs	Glu	Phe	Ala	Gln	Glu	Met	Thr	Phe	Asn
CLI	50	9		-1-	<b>V</b> 2	55					60				
Ile	Ser	Ser	Ser	Ser	Arg	Asp	Pro	Glu	Val	Cys	Leu	Asp	Leu	Arg	Pro
65					70	-				75		_		_	80
Gly	Thr	Asn	Tyr	Asn	Val	Ser	Leu	Arg	Ala	Leu	Ser	Ser	Glu	Leu	Pro
				85.					90					95	
Val	Val	Ile	Ser	Leu	Thr	Thr	<b>Gl</b> n	Ile	Thr	Glu	Pro	Pro	Leu	Pro	Glu
			100					105					110		
Val	Glu		Phe	Thr	Val	His	-	Gly	Pro	Leu	Pro		Leu	Arg	Leu
		115					120					125			
			_		_	<b>-</b>	-1						<b>01</b> -	7	
Arg	-	Ala	rys	GLU	Lys		GLY	Pro	TIE	ser		TYT	GIn	vaı	Leu
	130					135					140				
Unit	7	D=0	T 011	232	Leu	Cla	50-		Dho	Sor	Cvc	Acn	Sar	Gl vi	Gl.
145	rea	PIO	Leu	ALG	150	GIII	ser	TIIL	FILE	155	Cys	АЗР	Ser	GIU	160
143					130					133		•			100
Ala	Ser	Ser	Phe	Phe	Ser	Asn	Ala	Ser	Asp	Ala	Asp	Glv	Tvr	Val	Ala
				165					170		•	-	4 -	175	

- Ala Glu Leu Leu Ala Lys Asp Val Pro Asp Asp Ala Met Glu Ile Pro 180 185 190
- Ile Gly Asp Arg Leu Tyr Tyr Gly Glu Tyr Tyr Asn Ala Pro Leu Lys 195 200 205
- Arg Gly Ser Asp Tyr Cys Ile Ile Leu Arg Ile Thr Ser Glu Trp Asn 210 215 220
- Lys Val Arg Arg His Ser Cys Ala Val Trp Ala Gln Val Lys Asp Ser 225 230 235 240
- Ser Leu Met Leu Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala 245 250 255

Val Val Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val
260 265

<210> 977 <211> 477 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (471) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (473) <223> Xaa equals any of the naturally occurring L-amino acids Leu Phe Ser Pro Gln Val Glu Leu Thr Lys Ala Met Val Met Glu Lys 10 Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val Arg Gln Tyr Tyr Thr Leu Leu Asn Gln Ala Pro Asp Met Leu His Arg Phe Tyr Gly Lys Asn Ser Ser Tyr Val His Gly Gly Leu Asp Ser Asn Gly Lys Pro Ala Asp 50 55 Ala Val Tyr Gly Gln Lys Glu Ile His Arg Lys Val Met Ser Gln Asn Phe Thr Asn Cys His Thr Lys Ile Arg His Val Asp Ala His Ala Thr 85 90 Leu Asn Asp Gly Val Val Val Gln Val Met Gly Leu Leu Ser Asn Asn 100 Asn Gln Ala Leu Arg Arg Phe Met Gln Thr Phe Val Leu Ala Pro Glu 120 Gly Ser Val Ala Asn Lys Phe Tyr Val His Asn Asp Ile Phe Arg Tyr 130 135 140 Gln Asp Glu Val Phe Gly Gly Phe Val Thr Glu Pro Gln Glu Glu Ser 155 145 150

Glu	Glu	Glu	Val	Glu 165	Glu	Pro	Glu	Glu	Arg 170	Gln	Gln	Thr	Pro	Glu 175	Val
Val	Pro	Asp	Asp 180	Ser	Gly	Thr	Phe	Tyr 185	Asp	Gln	Ala	Val	Val 190	Ser	Asn
Asp	Met	Glu 195	Glu	His	Leu	Glu	Glu 200	Pro	Val	Ala	Glu	Pro 205	Glu	Pro	Asp
Pro	Glu 210	Pro	Glu	Pro	Glu	Gln 215	<b>G</b> lu	Pro	Val	Ser	Glu 220	Ile	Gln	Glu	Glu
Lys 225	Pro	Glu	Pro	Val	Leu 230	Glu	Glu	Thr	Ala	Pro 235	Glu	Asp	Ala	Gln	Lys 240
Ser	Ser	Ser	Pro	Ala 245	Pro	Ala	Asp	Ile	Ala 250	Gln	Thr	Val	Gln	Glu 255	Asp
Leu	Arg	Thr	Phe 260	Ser	Trp	Ala	Ser	Val 265	Thr	Ser	Lys	Asn	Leu 270	Pro	Pro
Ser	Gly	Ala 275	Val	Pro	Val	Thr	Gly 280	Ile	Pro	Pro	His	Val 285	Val	Lys	Val
Pro	Ala 290	Ser	Gln	Pro	Arg	Pro 295	Glu	Ser	Lys	Pro	Glu 300	Ser	Gln	Ile	Pro
Pro 305	Gln	Arg	Pro	Gln	Arg 310	Asp	Gln	Arg	Val	Arg 315	Glu	Gln	Arg	Ile	Asn 320
Ile	Pro	Pro	Gln	Arg 325	Gly	Pro	Arg	Pro	11e 330	Arg	Glu	Ala	Gly	Glu 335	Gln
Gly	Asp	Ile	Glu 340	Pro	Arg	Arg	Met	Val 345	Arg	His	Pro	Asp	Ser 350	His	Gln
Leu	Phe	Ile 355	Gly	Asn	Leu	Pro	His 360	Glu	Val	Asp	Lys	Ser 365	Glu	Leu	Lys
Asp	Phe 370	Phe	Gln	Ser	Tyr	Gly 375	Asn	Val	Val	Glu	Leu 380	Arg	Ile	Asn	Ser
Gly 385	Gly	Lys	Leu	Pro	Asn 390	Phe	Gly	Phe	Val	Val 395	Phe	Asp	Asp	Ser	Glu 400
Pro	Val	Gln	Lys	Val 405	Leu	Ser	Asn	Arg	Pro 410	Ile	Met	Phe	Arg	Gly 415	Glu
Val	Arg	Leu	Asn 420	Val	Glu	Glu	Lys	Lys 425	Thr	Arg	Ala	Ala	Arg 430	Glu	Gly

Asp Arg Arg Asp Asn Arg Leu Arg Gly Pro Gly Gly Pro Arg Gly Gly 440 435 Leu Gly Gly Met Arg Gly Pro Pro Arg Gly Gly Met Val Gln Lys 460 450 455 Pro Gly Phe Gly Val Gly Xaa Gly Xaa Ala Pro Arg Gln 470 <210> 978 <211> 339 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (326) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (336) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (339) <223> Xaa equals any of the naturally occurring L-amino acids Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly 10 Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe 35 40 Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Asn Lys 50 55

Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg

942

65					70					75					80
					. •									•	
Asn	Val	Gly	Leu	Cys 85	Glu	Ala	Ile	Val	Gln 90	Phe	Thr	Arg	Thr	Phe 95	Ser
Pro	Ser	Lys	Pro 100	Ala	Lys	Ser	Leu	His 105	Thr	Gln	Lys	Asn	Arg 110	Gln	Phe
Phe	Asn	Glu 115	Pro	Glu	Glu	Asn	Phe 120	Trp	Met	Val	Met	Val 125	Val	Arg	Xaa
Pro	Ile 130	Ile	Glu	Lys	Gln	Ser 135	Lys	Asp	Gly	Lys	Pro 140	Val	Ile	Glu	Tyr
Gln 145	Glu	Glu	Glu	Leu	Leu 150	Asp	Lys	Val	Tyr	Ser 155	Ser	Val	Leu	Arg	Gln 160
Суз	Tyr	Ser	Met	Туг 165	Lys	Leu	Phe	Asn	Gly 170	Thr	Phe	Leu	Lys	Ala 175	Met
Glu	Asp	Gly	Gly 180	Val	Lys	Leu	Leu	Lys 185	Glu	Arg	Leu	Glu	Lys 190	Phe	Phe
His	Arg	Туг 195	Leu	Gln	Thr	Leu	His 200	Leu	Gln	Ser	Cys	Asp 205	Leu	Leu	Asp
Ile	Phe 210	Gly	Gly	·Ile	Ser	Phe 215	Phe	Pro	Leu	Asp	Lys 220	Met	Thr	Tyr	Leu
Lys 225	Ile	Gln	Ser	Phe	Ile 230	Asn	Arg	Met	Glu	Glu 235	Ser	Leu	Asn	Ile	Val 240
Lys	Tyr	Thr	Ala	Phe 245	Leu	Tyr	Asn	Asp	Gln 250	Leu	Ile	Trp	Ser	Gly 255	Leu
Glu	Gln		Asp 260	Met	Arg	Ile	Leu	туr 265	Lys	Tyr	Leu	Thr	Thr 270	Ser	Leu
Phe	Pro	Arg 275	His	Ile	Glu	Pro	G <b>l</b> u 2 <b>80</b>	Leu	Ala	Gly	Arg	Asp 285	Ser	Pro	Ile
Arg	Ala 290	Glu	Met	Pro	Gly	Asn 295	Leu <sub>.</sub>	Gln	His	Tyr	Gly 300	Arg	Phe	Leu	Thr
Gly 305	Pro	Leu	Asn	Leu	Asn 310	Asp	Pro	Asp	Ala	Lys 315	Cys	Arg	Phe	Pro	Lys 320
Ile	Ph	Val	Asn	Thr 325	Xaa	Asp	Thr	Tyr	Glu 330	Glu	Leu	His	Leu	11e 335	Xaa

Tyr Lys Xaa

<210> 979 <211> 283 <212> PRT <213> Homo sapiens <400> 979 His Arg Glu Arg Arg Val Gly Leu Arg Cys Ala Arg Arg Thr Ser Glu Ala Ala Gly Ser Gly Ala Gly Pro Pro Gly Pro Leu Gln Gly Arg Ser Gly Ser Ser Trp Ala Pro Arg Pro Gly Arg Arg Thr Glu Glu Arg Arg 40 Lys Gly Ala Gly Gly Thr Arg Pro Arg Pro Ala Ala Ala Met Asn Ser 55 Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu 70 Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu 105 Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly 120 115 Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile **135** . Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu 150 155 Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Thr 165 170 Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu 185 Glu Ala Gly Arg Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg 260 205 Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly 210

Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser 225 230 235 240

Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met

245 250 255

Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys 260 265 270

Lys Thr Asp Lys Lys Arg Ala Leu Arg Arg Leu 275 280

<210> 980

<211> 353

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (333)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (346)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980

Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met
1 5 10 15

Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser 20 25 30

Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser 35 40 45

Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser 50 55 60

Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro 65 70 75. 80

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile 85 90 95

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu 100 105 110

Asp	His	Asn 115	Leu	Leu	Glu	Asn	Ser 120	Lys	Ile	Lys	Gly	Arg 125	Val	Phe	Ser
Lys	Leu 130	Lys	Gln	Leu	Lys	Lys 135	Leu	His	Ile	Asn	His 140		Asn	Leu	Thr
Glu 145	Ser	Val	Gly	Pro	Leu 150	Pro	Lys	Ser	Leu	Glu 155	Asp	Leu	Gln	Leu	Thr 160
His	Asn	Lys	Ile	Thr 165	Lys	Leu	Gly	Ser	Phe 170	Glu	Gly	Leu	Val	Asn 175	Leu
Thr	Phe	Ile	His 180	Leu	Gln	His	Asn	Arg 185	Leu	Lys	Glu	Asp	Ala 190	Val	Ser
Ala	Ala	Phe 195	Lys	Gly	Leu	Lys	Ser 200	Leu	Glu	Tyr	Leu	Asp 205	Leu	Ser	Phe
Asn	Gln 210	Ile	Ala	Arg	Leu	Pro 215	Ser	Gly	Leu	Pro	Val 220	Ser	Leu	Leu	Thr
Leu 225	Tyr	Leu	Asp	Asn	Asn 230	Lys	Ile	Ser	Asn	11e 235	Pro	Asp	Glu	Tyr	Phe 240
Lys	Arg	Phe	Asn	Ala 245	Leu	Gln	Tyr	Leu	Arg 250	Leu	Ser	His	Asn	Glu 255	Leu
Ala	Asp	Ser	Gly 260	Ile	Pro	Gly	Asn	Ser 265	Phe	Asn	Val	Ser	Ser 270	Leu	Val
Glu	Leu	Asp 275	Leu	Ser	Tyr	Asn	Lys 280	Leu	Lys	Asn	Ile	Pro 285	Thr	Val	Asn
Glu	Asn 290	Leu	Glu	Asn	Tyr	Tyr 295	Leu	Glu	Val	Asn	Gln 300	Leu	Glu	Lys	Phe
Asp 305	Ile	Lys	Ser	Phe	Cys 310	Lys	Ile	Leu	Gly	Pro 315	Leu	Ser	Tyr	Ser	Lys 320
Ile	Lys	His	Leu	Arg 325	Leu	Asp	Gly	Asn	Arg 330	Ile	Ser	Xaa	Thr	Ser 335	Leu
Pro	Pro	Asp	Met 340	Tyr	Glu	Суз	Leu	Arg 345	Xaa	Ala	Asn	Glu	Val 350	Thr	Leu

Asn

<210> 981 <211> 343 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (343) <223> Xaa equals any of the naturally occurring L-amino acids Asn Leu Thr Lys Asn Met Thr Ala Leu Ser Ser Glu Asn Cys Ser Phe 10 Gln Tyr Gln Leu Arg Gln Thr Asn Gln Pro Leu Asp Val Asn Tyr Leu Leu Phe Leu Ile Ile Leu Gly Lys Ile Leu Leu Asn Ile Leu Thr Leu 35 40 Gly Met Arg Arg Lys Asn Thr Cys Gln Asn Phe Met Glu Tyr Phe Cys Ile Ser Leu Ala Phe Val Asp Leu Leu Leu Val Asn Ile Ser Ile 75 70 Ile Leu Tyr Phe Arg Asp Phe Val Leu Leu Ser Ile Arg Phe Thr Lys Tyr His Ile Cys Leu Phe Thr Gln Ile Ile Ser Phe Thr Tyr Gly Phe 100 105 Leu His Tyr Pro Val Phe Leu Thr Ala Cys Ile Asp Tyr Cys Leu Asn 115 120 Phe Ser Lys Thr Thr Lys Leu Ser Phe Lys Cys Gln Lys Leu Phe Tyr 130 135 Phe Phe Thr Val Ile Leu Ile Trp Ile Ser Val Leu Ala Tyr Val Leu 155 145 150 Gly Asp Pro Ala Ile Tyr Gln Ser Leu Lys Ala Gln Asn Ala Tyr Ser 170 Arg His Cys Pro Phe Tyr Val Ser Ile Gln Ser Tyr Trp Leu Ser Phe 180 Phe Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu 200 195

Val Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu

210 215 220 Thr Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg 235 230 Ser Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr 245 250 Trp Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val 260 265 270 Gln Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val 280 Asn Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu 295 Asn Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys 305 310 Cys Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys 325 -330 Pro Ile Ser Ile Met Ile Xaa 340 <210> 982 <211> 142 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (108) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (121) WO 00/55350

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WO 00/55350

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<210> 983
<211> 193
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the maturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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Val Asn Phe Lys Ala Phe Glu Met Gly Lys Asp Tyr Tyr Cys Ile Leu
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Gly Ile Glu Lys Gly Ala Ser Asp Glu Asp Ile Lys Lys Ala Tyr Arg
Lys Gln Ala Leu Lys Phe His Pro Asp Lys Asn Lys Ser Pro Gln Ala
Glu Glu Lys Phe Lys Glu Val Ala Glu Ala Tyr Glu Val Leu Ser Asp
     50
Pro Lys Lys Arg Glu Ile Tyr Xaa Gln Phe Gly Glu Glu Gly Leu Lys
Gly Gly Ala Gly Gly Thr Asp Gly Gln Gly Gly Thr Phe Arg Tyr Thr
                                     90
                 85
                                                         95
Phe His Gly Asp Pro His Ala Thr Phe Ala Ala Phe Phe Gly Gly Ser
                                105
            100
Asn Pro Phe Glu Ile Phe Phe Gly Arg Arg Met Gly Gly Arg Asp
                         . 120
Ser Glu Glu Met Glu Ile Xaa Gly Asp Pro Xaa Ser Ala Phe Gly Phe
                                            140
    130
                        135
Ser Met Asn Gly Tyr Pro Arg Asp Arg Asn Ser Val Gly Pro Ser Arg
                    150
                                        155
145
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Leu Lys Gln Asp Pro Pro Val Ile His Glu Leu Arg Val Ser Leu Glu

165 170 175

Glu Ile Tyr Ser Gly Cys Thr Lys Arg Asp Glu Arg Phe Leu Glu Lys 180 185 190

Gly

<210> 984

<211> 402

<212> PRT

<213> Homo sapiens

<400> 984

Lys Ser Tyr Glu Met Glu Leu Glu Glu Gly Lys Ala Gly Ser Gly Leu
1 5 10 15

Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln Leu Ile Val Asn 20 25 30

Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln Arg Asn Glu Leu 35 40 45

Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln Leu Gln Glu
50 55 60

Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met Asp Lys Lys 65 70 75 80

Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val Val Asp 85 90 95

Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys Arg Val Ala Leu 100 105 110

Arg Asn Asp Ser Tyr Thr Leu His Lys Ile Leu Pro Asn Lys Val Asp 115 120 125

Pro Leu Val Ser Leu Met Met Val Glu Lys Val Pro Asp Ser Thr Tyr 130 135 140

Glu Met Ile Gly Gly Leu Asp Lys Gln Ile Lys Glu Ile Lys Glu Val 145 150 155 160

Ile Glu Leu Pro Val Lys His Pro Glu Leu Ph Glu Ala Leu Gly Il 165 170 175

WO 00/55350 PCT/US00/05882

Ala	Gln	Pro	Lys	Gly	Val	Leu	Leu	Tyr	Gly	Pro	Pro	Gly	Thr	Gly	Lys
			180					185					190		

Thr Leu Leu Ala Arg Ala Val Ala His His Thr Asp Cys Thr Phe Ile 195 200 205

Arg Val Ser Gly Ser Glu Leu Val Gln Lys Phe Ile Gly Glu Gly Ala 210 215 220

Arg Met Val Arg Glu Leu Phe Val Met Ala Arg Glu His Ala Pro Ser 225 230 235 240

Ile Ile Phe Met Asp Glu Ile Asp Ser Ile Gly Ser Ser Arg Leu Glu 245 250 255

Gly Gly Ser Gly Gly Asp Ser Glu Val Gln Arg Thr Met Leu Glu Leu 260 265 270

Leu Asn Gln Leu Asp Gly Phe Glu Ala Thr Lys Asn Ile Lys Val Ile 275 . 280 285

Met Ala Thr Asn Arg Ile Asp Ile Leu Asp Ser Ala Leu Leu Arg Pro 290 295 300

Gly Arg Ile Asp Arg Lys Ile Glu Phe Pro Pro Pro Asn Glu Glu Ala 305 310 315 320

Arg Leu Asp Ile Leu Lys Ile His Ser Arg Lys Met Asn Leu Thr Arg 325 330 335

Gly Ile Asn Leu Arg Lys Ile Ala Glu Leu Met Pro Gly Ala Ser Gly
340 345 350

Ala Glu Val Lys Gly Val Cys Thr Glu Ala Gly Met Tyr Ala Leu Arg 355 360 365

Glu Arg Arg Val His Val Thr Gln Glu Asp Phe Glu Met Ala Val Ala 370 375 380

Lys Val Met Gln Lys Asp Ser Glu Lys Asn Met Ser Ile Lys Lys Leu 385 390 395 400

Trp Lys

<210> 985

<211> 347

<212> PRT

<213> Homo sapiens

<400> 985 Arg Arg Arg Trp His Pro Gly Pro Gly Pro Arg Arg Thr Ala Gly Lys Gly Pro Arg Lys Val Ala Ser Ala Ser Ala Ala Ala Ser Thr 25 Leu Ser Glu Pro Pro Arg Arg Thr Gln Glu Ser Arg Thr Arg Thr Arg 45 40 Ala Leu Gly Leu Pro Thr Leu Pro Met Glu Lys Leu Ala Ala Ser Thr Glu Pro Gln Gly Pro Arg Pro Val Leu Gly Arg Glu Ser Val Gln Val Pro Asp Asp Gln Asp Phe Arg Ser Phe Arg Ser Glu Cys Glu Ala Glu 85 Val Gly Trp Asn Leu Thr Tyr Ser Arg Ala Gly Val Ser Val Trp Val 105 Gln Ala Val Glu Met Asp Arg Thr Leu His Lys Ile Lys Cys Arg Met 120 Glu Cys Cys Asp Val Pro Ala Glu Thr Leu Tyr Asp Val Leu His Asp 130 Ile Glu Tyr Arg Lys Lys Trp Asp Ser Asn Val Ile Glu Thr Phe Asp 155 150 Ile Ala Arg Leu Thr Val Asn Ala Asp Val Gly Tyr Tyr Ser Trp Arg 170 165 Cys Pro Lys Pro Leu Lys Asn Arg Asp Val Ile Thr Leu Arg Ser Trp 180 185 Leu Pro Met Gly Ala Asp Tyr Ile Ile Met Asn Tyr Ser Val Lys His Pro Lys Tyr Pro Pro Arg Lys Asp Leu Val Arg Ala Val Ser Ile Gln 215 Thr Gly Tyr Leu Ile Gln Ser Thr Gly Pro Lys Ser Cys Val Ile Thr 225 230

Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro Lys Trp Val Val

Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met Lys Lys Met Tyr

250

953

270 260 265 Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His Leu Pro His 280 Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu Pro Ser Leu Ala 295 300 Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu Glu Asn Ile Asp 305 Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met Gly Gly Ala Gly 330 Gly Glu Gly Ser Asp Asp Asp Thr Ser Leu Thr 340 345 <210> 986 <211> 106 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <400> 986 Ala Ser Ile Cys Ala Asp Ala Lys Leu Trp Thr Met Tyr Ala Arg Pro 5 Ser Asn Arg Gln Arg Cys Leu Gly Ser Lys His Thr Glu Arg Thr Trp 20 25 Thr Ala Trp Xaa Arg Ser Leu Ile Arg Pro Phe Ser Met His Ile Leu 40 Pro Lys Gln Ser Gln Ile Pro Leu Lys Gly Ala Asp Ser Ile Ser Ser 50 55 60 Ser Val Gln Thr Leu Arg Ala Glu Arg Ser Gly Ser Gly Ser His Val 65 Thr Ala Gln Asn Asn Leu Arg Asn Pro Leu Cys Pro Glu Gly Ser Leu 85

105

Thr Ser Pro Ser Gly Ser Glu Gln Ser Leu

<210> 987

<211> 172

<212> PRT

<213> Homo sapiens

<400> 987

Thr Pro Arg Gly Ala Val Lys Pro Ser Ala Asn Lys Tyr Pro Ile Phe 1 5 10 15

Phe Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe 20 25 30

Pro Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys
35 40 45

Gly Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys
50 55 60

Phe Thr Gly Tyr Gln Ala Ile Gln Gln Gln Ser Ser Glu Thr Glu 65 70 75 80

Gly Glu Gly Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp 85 90 95

Arg Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly 100 105 110

Ser Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser 115 120 125

Arg Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu 130 135 140

Asn Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn 145 150 155 160

Thr Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr 165 170

<210> 988

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 988

Ala Lys Gln Asp Pro Val Pro Glu Gln Glu Met Ser Pro Ser Ile Ser

1 10 15

Asp Pro Cys Leu Gly Gln Ala Leu Met Gly Gly Pro Ser Phe Lys Ala 20 25 30

Val Val Gly Thr Ala Pro Pro Asn Ala Ser Leu Ser Phe Leu Pro Ile 35 40 45

His Gln Tyr Thr Ala Gly Pro Phe Leu Val Phe Val Gln Gln Glu Thr
50 55 60

His Phe Trp Trp Asp Met Pro Ser Ser Ala Thr Gly Pro Leu Thr Pro 65 70 75 80

Cys Ile Ser Val Leu Pro Val Ser Ala Gly Thr Asp Ser Lys Gly Lys
85 90 95

Pro Ser Val Trp Xaa Ile Gly Gly Trp Glu Gln Arg Gly Glu Asn Ala 100 105 110

Val Leu Ser Phe Cys Leu Gly Ile Pro His Thr Thr Trp Val Leu Pro 115 120 125

Gly Lys Pro Val Leu Ser Lys Thr Met Asp Leu Ala Ser Pro Thr Gly 130 135 140

Leu Xaa Ser Gln His Leu Arg Glu Gly Gly Trp Lys Arg Leu Cys Pro 145 150 155 160

His Phe Glu Leu Gln Ala Gly Ser Ala Ala Leu Lys Pro Ser Ser Asp 165 170 175

Phe Leu Thr Gln Asp Pro Ala Pro Gly Arg Arg Val Gly Ala Gly
180 185 190

Leu Val Gly Gln Lys Glu Ala Ser Ala Gly Leu Glu Asp Pro Ser Ser 195 200 205

Thr Ser His Ser Val Ser Ser Ser Trp Glu Asn Leu Cys Gln Ala Arg

Ala Val Ile Gly Pro His Glu Val Ser Glu Ala Pro Ser Trp

956

225 230 235

<210> 989

<211> 74

<212> PRT

<213> Homo sapiens

<400> 989

Ser Leu Ile Lys Ala Leu Tyr Ile Leu Tyr Gly Phe Arg His His His 1 5 10 15

Thr Lys Lys Leu Thr Pro Ser Ile Pro Val Phe Val Gly Gln Ala Ser 20 25 30

Phe Phe Ser Pro Cys Ser Val Ser His Thr Val Cys Leu Gln Lys Leu 35 40 45

Leu Ile Gly Ala Lys Tyr Asn Cys Gln Tyr Asn Leu Lys Thr Thr Met 50 55 60

Cys Pro Arg Arg Pro Thr Cys Leu Phe Pro 65 70

<210> 990

<211> 295

<212> PRT

. <213> Homo sapiens

<400> 990

Ala Pro Ala Arg Pro Gly Ser Leu Pro Ser Thr Arg Ser Ala Pro Leu 1 5 10 15

Val Pro Ser Ser Arg Arg Pro Ala Glu Ser Pro Leu Arg Ser Arg
20 25 30

Arg Cys Arg Gly Asp Met Val Leu Cys Val Gln Gly Pro Arg Pro Leu
35 40 45

Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro Ser Leu 50 55 60

Glu Leu Pro Lys Pro Val Met Gln Pro Leu Pro Ala Gly Ala Phe Leu 65 70 75 80

Glu Glu Val Ala Glu Gly Thr Pr Ala Gln Thr Glu Ser Glu Pro Lys 85 90 95

Val Leu Asp Pro Glu Glu Asp Leu Cys Ile Ala Lys Thr Phe Ser 100 105 110

Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala Ser Glu 115 120 125

Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu Val Arg 130 135 140

Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys Thr Thr 145 150 155 160

Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser Phe Arg 165 170 175

Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe Pro Asp 180 185 190

Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala Asp Thr 195 200 205

Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro Met Pro 210 215 220

Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro Pro Ala 225 230 235 240

Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg Ser Ser 245 250 255

Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg Leu Val 260 265 270

Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp Tyr Leu 275 280 285

Arg Gln Tyr Pro Phe Gln Leu 290 295

<210> 991

<211> 58

<212> PRT

<213> Homo sapiens

<400> 991

Leu His Lys Val Ser Ile Leu Leu Tyr S r Ala Val Leu Val Ser Phe
1 5 10 15

Ser Cys Il Gly Phe His Cys Ile Tyr Ser Leu Phe Met Leu Asn Leu

958

25 30 20 Ala Lys Asp Glu His Cys Pro Pro Leu Lys Cys Leu Cys His Phe Glu 40 Phe Cys Ala Asn Phe Val Ala Arg Met Arg 55 <210> 992 <211> 203 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 992 Ala His Ala Ser Pro Thr Arg Xaa Glu Ala Arg Val Val Val Arg Cys Leu Pro Ala Cys Val Arg Asp Leu Pro Asp Ser Val Ala Ala Met 25 20 Ala Ser Asp Glu Gly Lys Leu Phe Val Gly Gly Leu Ser Phe Asp Thr 40 Asn Glu Gln Ser Leu Glu Gln Val Phe Ser Lys Tyr Gly Gln Ile Ser 55 Glu Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser Arg Gly Phe 70 65 Gly Phe Val Thr Phe Glu Asn Ile Asp Asp Ala Lys Asp Ala Met Met Ala Met Asn Gly Lys Ser Val Asp Gly Arg Gln Ile Arg Val Asp Gln 105 Ala Gly Lys Ser Ser Asp Asn Arg Ser Arg Gly Tyr Arg Gly Gly Ser 115 Ala Gly Gly Arg Gly Phe Phe Arg Gly Gly Arg Gly Arg Gly 135

Phe Ser Arg Gly Gly Gly Asp Arg Gly Tyr Gly Gly Asn Arg Phe Glu

150

Ser Arg Ser Gly Gly Tyr Gly Gly Ser Arg Asp Tyr Tyr Ser Ser Arg 165 170 175

Ser Gln Ser Gly Gly Tyr Ser Asp Arg Ser Ser Gly Gly Ser Tyr Arg 180 185 190

Asp Ser Tyr Asp Ser Tyr Ala Thr His Asn Glu 195 200

<210> 993

<211> 252

<212> PRT

<213> Homo sapiens

<400> 993

Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg
1 5 10 15

Val Glu Arg Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe 20 25 30

Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile 35 40 45

Cys Arg Ala Lys Ser Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr
50 55 60

Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly 65 70 75 80

Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu 85 90 95

Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala 100 105 110

Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu 115 120 125

Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu 130 135 140

Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser 145 150 155 160

Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp 165 170 175

Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Ph Ser Phe Leu

960

185 190 180 Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr 200 Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro Cys Cys Ser Asn Lys Lys Ala Ala Glu Lys Pro Glu Glu Gln Gly 225 230 Gln Ser Leu Cys Pro Ser Pro Leu Arg Ser Gly Asp 250 245 <210> 994 <211> 170 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <400> 994 Arg Thr Arg Gly Xaa Asp Thr Gln Pro Thr Val Cys Thr Asp Ala Pro Ser Leu Leu Pro Leu Ser Arg Leu His Leu Arg Gly Ser Trp Asp Arg 30 20 25 Arg Ser Val Ala Asn Met Gln Leu Phe Val Arg Ala Gln Glu Leu His 35 40 Thr Phe Glu Val Thr Gly Gln Glu Thr Val Ala Gln Ile Lys Ala His Val Ala Ser Leu Glu Gly Ile Ala Pro Glu Asp Gln Val Val Leu Leu 75 70 Ala Gly Ala Pro Leu Glu Asp Glu Ala Thr Leu Gly Gln Cys Gly Val 85 Glu Ala Leu Thr Thr Leu Glu Val Ala Gly Arg Met Leu Gly Gly Lys 105 Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly Gln Thr Pro 120

961

Lys Val Ala Lys Gln Glu Lys Lys Lys Lys Lys Thr Gly Arg Ala Lys 130 135 140

Arg Arg Met Gln Tyr Asn Arg Arg Phe Val Asn Val Val Pro Thr Phe 145 150 155 160

Gly Lys Lys Gly Pro Asn Ala Asn Ser 165 170

<210> 995

<211> 156

<212> PRT

<213> Homo sapiens

<400> 995

Gly Ser Gly Thr His Pro Ala Arg Ala Ala Pro Ala Pro His Ala Arg
1 5 10 15

Ala Ser Phe Ser Arg Pro Leu Ala Pro Arg Arg Ser His Leu Ser Ser 20 25 30

Leu Ala His Ala Arg Pro Ala Arg Glu Pro Arg Arg Leu Gly Pro
35 40 45

Ala Glu Ala Pro Pro Arg His Val Phe Ala Ser Arg Arg Lys Leu Glu 50 55 60

Thr Lys Ala Gly His Pro Pro Ala Val Lys Ala Gly Gly Met Arg Ile 65 70 75 80

Val Gln Lys His Pro His Thr Gly Asp Thr Lys Glu Glu Lys Asp Lys 85 90 95

Asp Asp Gln Glu Trp Glu Ser Pro Ser Pro Pro Lys Pro Thr Val Phe 100 105 110

Ile Ser Gly Val Ile Ala Arg Gly Asp Lys Asp Phe Pro Pro Ala Ala 115 120 125

Ala Gln Val Ala His Gln Lys Pro His Ala Ser Met Asp Lys His Pro 130 135 140

Ser Pro Arg Thr Gln His Ile Gln Gln Pro Arg Lys 145 150 155

<210> 996

<211> 217

<212	2> PI	RT													
<21	3> н	omo :	sapi	ens											
<220	0>														
<22	1> S	ITE													
<222	2> (	27)													
<22	3> Xa	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	acio	as
	)> 9														
Asn	Ser	Ala	Glu	Gln	Glu	Gly	Ser	Gln	Trp	Ser	Leu	Pro	Val		His
1				5					10					15	
														_	
Ser	Val	Pro	Asp	Pro	Ala	Cys	Leu		Leu	Xaa	Arg	Val		Lys	GI
			20					25					. 30		
_				_	_	_			_		<b>61</b>	<b>01</b>	1	C	
Leu	Ala		Val	Arg	ser	ser		Pro	Arg	Ala	GIY		vai	ser	Arg
		35					40					45			
N	T 011	210	Ala	1701	7~~	502	Th ∽	Wa 1	T.011	Cvc	Ara	Δla	Val	Glv	Cvs
Arg	50	нта	HIG	vai	ALG	55	1111	val	neu	Cys	60	niu	vul	O <sub>1</sub>	<b>- J</b> .
	50					,,,					•				
Tle	Leu	Ala	Glu	Leu	Leu	Ala	His	Ara	Pro	Leu	Leu	Pro	Gly	Thr	Sei
65					70					75			•		80
••															
Glu	Ile	His	Gln	Ile	Asp	Leu	Ile	Val	Gln	Leu	Leu	Gly	Thr	Pro	Sei
				85	_				90					95	
Glu	Asn	Ile	Trp	Pro	Gly	Phe	Ser	Lys	Leu	Pro	Leu	Val	Gly	Gln	Ty
			100				- '	105	-			-	110		
					•										
Ser	Leu	Arg	Lys	Gln	Pro	Tyr		Asn	Leu	Lys	His		Phe	Pro	Tr
		115					120					125			
			_				_	_		_	_	_	_	_,	
Leu		Glu	Ala	Gly	Leu		Cys	Cys	Thr	ser		ser	Суз	Thr	Thi
	130					135					140				
•		<b>7 -</b>	Gly	N	N	77-0	c1	mh-	<b>71</b> 2	m	7~~	A 1 a	Pro	T10	501
	Arg	гÀа	GIY	Arg		PIO	GIY	1111	Ala	155	ALG	NIG	FLO	116	160
145					150					133					100
Ara	Ara	Ser	Pro	Tur	Pro	Val	Ser	Ara	Ser	Ser	Cvs	Ara	Pro	Phe	Pro
ALY	AL 9	Jer	110	165	110	· · · ·	-	5	170		0,72	5		175	
				105											
Thr	Thr	Ala	Thr	Ser	Glv	Pro	Pro	Gln	Pro	Pro	Pro	Arg	Ala	Arg	Ala
			180		1			185					190		
Ser	Ala	Val	Asn	Pro	Asp	Gly	Gly	Pro	Gly	Thr	Arg	Leu	Tyr	Ser	His
		195			_	-	200		-			205			

Thr Arg Ser Ser Asp Gln Trp Cys Leu

215

<210> 997

WO 00/55350 PCT/US00/05882

<211> 466 <212> PRT <213> Homo sapiens <400> 997 Val Ser Pro Arg Ala Gly Gly Ala Gly Asn Asn Arg Gly Arg Ala His 5 Arg Ala Ser Ser Cys Ser Leu Pro Ala Pro Pro Ala Thr Leu Asp Pro 25 20 Arg Ile Pro Pro Ala Arg Leu Pro Ala Met Ala Asp Lys Glu Ala Ala 40 Phe Asp Asp Ala Val Glu Glu Arg Val Ile Asn Glu Glu Tyr Lys Ile 50 55 , Trp Lys Lys Asn Thr Pro Phe Leu Tyr Asp Leu Val Met Thr His Ala 75 Leu Glu Trp Pro Ser Leu Thr Ala Gln Trp Leu Pro Asp Val Thr Arg 90 85 Pro Glu Gly Lys Asp Phe Ser Ile His Arg Leu Val Leu Gly Thr His 105 100 Thr Ser Asp Glu Gln Asn His Leu Val Ile Ala Ser Val Gln Leu Pro 125 120 Asn Asp Asp Ala Gln Phe Asp Ala Ser His Tyr Asp Ser Glu Lys Gly 135 Glu Phe Gly Gly Phe Gly Ser Val Ser Gly Lys Ile Glu Ile Glu Ile 150 145 Lys Ile Asn His Glu Gly Glu Val Asn Arg Ala Arg Tyr Met Pro Gln 170 165 Asn Pro Cys Ile Ile Ala Thr Lys Thr Pro Ser Ser Asp Val Leu Val 185 Phe Asp Tyr Thr Lys His Pro Ser Lys Pro Asp Pro Ser Gly Glu Cys 200 195 Asn Pro Asp Leu Arg Leu Arg Gly His Gln Lys Glu Gly Tyr Gly Leu 215 210 Ser Trp Asn Pro Asn Leu Ser Gly His Leu Leu Ser Ala Ser Asp Asp

225					230					235					240
His	Thr	Ile	Cys	Leu 245	Trp	Asp	Ile	Ser	Ala 250	Val	Pro	Lys	Glu	Gly 255	Lys
Val	Val	Asp	Ala 260	Lys	Thr	Ile	Phe	Thr 265	Gly	His	Thr	Ala	Val 270	Val	Glu
Asp	Val	Ser 275	Trp	His	Leu	Leu	His 280	Glu	Ser	Leu	Phe	Gly 285	Ser	Val	Ala
Asp	Asp 290	Gln	Lys	Leu	Met	Ile 295	Trp	Asp	Thr	Arg	Ser 300	Asn	Asn	Thr	Ser
Lys 305	Pro	Ser	His	Ser	Val 310	Asp	Ala	His	Thr	Ala 315	Glu	Val	Asn	Cys	120
Ser	Phe	Asn	Pro	Tyr 325	Ser	Glu	Phe	Ile	Leu 330	Ala	Thr	Gly	Ser	Ala 335	Asp
Lys	Thr	Val	Ala 340	Leu	Trp	Asp	Leu	Arg 345	Asn	Leu	Lys	Leu	Lys 350	Leu	His
Ser	Phe	Glu 355	Ser	His	Lys	Asp	Glu 360	Ile	Phe	Gln	Val	Gln 365	Trp	Ser	Pro
His	Asn 370	Glu	Thr	Ile	Leu	Ala 375	Ser	Ser	Gly	Thr	Asp 380	Arg	Arg	Leu	Asn
Val 385	Trp	Asp	Leu	Ser	Lys 390	Ile	Gly	Glu	Glu	Gln 395	Ser	Pro	Glu	Asp	Ala 400
Glu	Asp	Gly	Pro	Pro 405	Glu	Leu	Leu	Phe	Ile 410	His	Gly	Gly	His	Thr 415	Ala
Lys	Ile	Ser	Asp 420	Phe	Ser	Trp	Asn	Pro 425	Asn	Glu	Pro	Trp	Val 430	Ile	Cya
Ser	Val	Ser 435	Glu	Asp	Asn	Ile	Met 440	Gln	Val	Trp	Gln	Met 445	Ala	Glu	Asn
Ile	Tyr 450	Asn	Asp	Glu	Asp	Pro 455	Glu	Gly	Ser	Val	Asp 460	Pro	Glu	Gly	Gln
Gly 465	Ser												•		

<210> 998 <211> 165

965

<212> PRT <213> Homo sapiens

<400> 998

Thr Arg Pro Pro Thr Arg Arg Pro Thr Arg Pro Pro Lys Ala Lys Lys
1 5 10 15

Glu Ala Pro Ala Pro Pro Lys Ala Glu Ala Lys Ala Lys Ala Leu Lys
20 25 30

Ala Lys Lys Ala Val Leu Lys Gly Val His Ser His Lys Lys Lys 35 40 45

Ile Arg Thr Ser Pro Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg 50 ... 55 60

Arg Gln Pro Lys Tyr Pro Arg Lys Ser Ala Pro Arg Arg Asn Lys Leu 65 70 75 80

Asp His Tyr Ala Ile Ile Lys Phe Pro Leu Thr Thr Glu Ser Ala Met 85 90 95

Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val Asp Val Lys 100 105 110

Ala Asn Lys His Gln Ile Lys Gln Ala Val Lys Lys Leu Tyr Asp Ile 115. 120 125

Asp Val Ala Lys Val Asn Thr Leu Ile Arg Pro Asp Gly Glu Lys Lys 130 135 140

Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Leu Asp Val Ala Asn 145 150 155 160

Lys Ile Gly Ile Ile 165

<210> 999

<211> 194

<212> PRT

<213> Homo sapiens

<400> 999

Pro Glu Asn Ser Thr Ser Ser Phe Leu Leu Trp Gly Cys Pro Pro Ser
1 5 10 15

Val Val Cys Phe Thr Val Gly Ser Pro Ala Arg Arg Pro Gln Cys Phe 20 25 . 30

Leu Arg Ala Glu Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser 40 Met Ala Leu Leu Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro Gln Trp Gln Met Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln 70 65 Ala Met Tyr Lys Gly Leu Trp Net Asp Cys Val Thr Gln Ser Thr Gly 90 85 Met Met Ser Cys Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala 105 Leu Gln Ala Thr Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe 115 Leu Ala Met Phe Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly 135 Gly Asp Asp Lys Val Lys Lys Ala Arg Ile Ala Met Gly Gly Ile 155 150 Ile Phe Ile Val Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr 165 170 Gly His Gln Ile Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn 190 180 <sup>--</sup> 185 Ile Lys

<210> 1000

<211> 362

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1000

Arg Gln Gln Arg Thr Arg Lys Lys Pro Ala Gly Ala Ala Leu Gly
1 5 10 15

Ala Leu Gly Pro Arg Ala Gln Leu Xaa Ala Ala Ala Gln Thr Asn Ser 20 25 30

Asn	Ala	35	GIÀ	Lys	GIn	Leu	<b>A</b> FG	гÀг	GIU	ser	Gin	45	Asp	Arg	гÀг
Asn	Pro 50		Pro	Pro	Ser	Val 55	Gly	Val	Val	Asp	Lys 60	Lys	Glu	Glu	Thr
Gln 65	Pro	Pro	Val	Ala	Leu 70	Lys	Lys	Glu	Gly	Ile 75	Arg	Arg	Val	Gly	Arg
Arg	Pro	Asp	Gln	Gln 85	Leu	Gln	Gly	Glu	Gly 90	Lys	Ile	Ile	Asp	Arg 95	Arg
Pro	Glu	Arg	Arg 100	Pro	Pro	Arg	Glu	Arg 105	Arg	Phe	Glu	Lys	Pro 110	Leu	Glu
	_	115		_			120					125	Ile		
	130					135					140		Gly		
145	_				150					155			Gly		160
		_		165					170				Ser	175	
			180					185					Ser 190		
	_	195		_			200					205	Ser		
	210					215					220		Ala		
225		-			230					235			Gly		240
				245					250				Asp	255	•
			260					265					Asp 270		
_	_	275			•		280					285	Glu		
Ala	Glu	Asp	Ser	val		Asp		HIS	rue	Arg	Lys	Pro	Ala	Asn	Asp

Ile Thr Ser Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly 305 310 Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Arg Gly Arg Pro 330 Asn Arg Gly Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val 345 Asp Asp Pro Glu Ala Phe Pro Ala Leu Ala 360 <210> 1001 <211> 207 <212> PRT <213> Homo sapiens <400> 1001 Leu Met Ser Val Val Arg Gly Phe Ser Glu Ala Ala Gln Tyr Asn Pro Glu Pro Pro Pro Pro Arg Thr His Tyr Ser Asn Ile Glu Ala Asn 20 Glu Ser Glu Glu Val Arg Gln Phe Arg Arg Leu Phe Ala Gln Leu Ala 40 Gly Asp Asp Met Glu Val Ser Ala Thr Glu Leu Met Asn Ile Leu Asn · 55 Lys Val Val Thr Arg His Pro Asp Leu Lys Thr Asp Gly Phe Gly Ile 65 70 Asp Thr Cys Arg Ser Met Val Ala Val Met Asp Ser Asp Thr Thr Gly Lys Leu Gly Phe Glu Glu Phe Lys Tyr Leu Trp Asn Asn Ile Lys Arg 105 Trp Gln Ala Ile Tyr Lys Gln Phe Asp Thr Asp Arg Ser Gly Thr Ile 115 120 Cys Ser Ser Glu Leu Pro Gly Ala Phe Glu Ala Ala Gly Phe His Leu 135 Asn Glu His Leu Tyr Asn Met Il Ile Arg Arg Tyr Ser Asp Glu Ser

969

Gly Asn Met Asp Phe Asp Asn Phe Ile Ser Cys Leu Val Arg Leu Asp 165 170 Ala Met Phe Arg Ala Phe Lys Ser Leu Asp Lys Asp Gly Thr Gly Gln 185 Ile Gln Val Asn Ile Gln Glu Trp Leu Gln Leu Thr Met Tyr Ser 205 200 195 <210> 1002 <211> 21 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1002 Ile Phe Cys Asp Thr Arg Ser His Gln Val Ala Xaa Gly Trp Phe Arg 10 Ile Pro Gly Leu Lys 20 <210> 1003 <211> 109 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (103) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1003

970

Met Pro Gln Leu Gly Leu Ser Cys Ile Pro Val Glu Gly Pro Xaa Pro 1 5 10 15

Cys Leu Xaa Glu Val Arg Leu Cys Cys Val Asn Gly Gln Ala Leu Pro 20 25 30

Gln Pro Thr Pro Gly Lys Val His Leu Phe Ser Gly Leu Tyr Lys Val
35 40 45

Ser Trp Gly Pro Val Ala Ser Leu Pro Val Arg Ser Asp Phe Ser Leu 50 55 60

Ser Ser Ser Pro Val Gly Glu Thr Lys Pro Asp Trp Gly Ala Gln Gly 65 70 75 80

Glu His Gly Lys Gly Arg Leu Pro Cys Leu Ser Leu Ala Val Arg Val 85 90 95

Arg Val Thr His Thr Lys Xaa Glu Cys Gly Gln Gln Val

<210> 1004

<211> 542

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (252)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (519)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1004

Lys Asp Pro Glu Glu Tyr Cys Cys Thr Pro Ala Ala Arg Gly Arg Gly
1 5 10 15

Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe Gly 20 25 30

Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His Thr 35 40 45

Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln Glu 50 55 60

His 65	Leu	Asp	Tyr	Glu	Ile 70	Ile	<b>G</b> ln	Ser	Leu	Asn 75	Pro	Glu	Phe	Asn	80 Lys
Ala	Val	Ile	Arg	Val 85	Asn	Val	Phe	Arg	Glu 90	His	Arg	Gln	Thr	Ile 95	Gln
туr	Ile	His	Pro 100	Ala	Asp	Ala	Val	Lys 105	Leu	Gly	Gln	Ala	Glu 110	Leu	Val
Val	Ile	Asp 115	Glu	Ala	Ala	Ala	11e 120	Pro	Leu	Pro	Leu	Val 125	Lys	Ser	Leu
Leu	Gly 130	Pro	Tyr	Leu	Val	Phe 135	Met	Ala	Ser	Thr	11e 140	Asn	Gly	Tyr	Glu
Gly 145	Thr	Gly	Arg	Ser	Leu 150	Ser	Leu	Lys	Leu	Ile 155	Gln	Gln	Leu	Arg	Gln 160
Gln	Ser	Ala	Gln	Ser 165	Gln	Val	Ser	Thr	Thr 170	Ala	Glu	Asn	Lys	Thr 175	Thr
Thr	Thr	Ala	Arg 180	Leu	Ala	Ser	Ala	Arg 185	Thr	Leu	His	Glu	Val 190	Ser	Leu
Gln	Glu	Ser 195	Ile	Arg	Tyr	Ala	Pro 200	Gly	Asp	Ala	Val	Glu 205	Lys	Trp	Leu
Asn	Asp 210	Leu	Leu	Суз	Leu	Asp 215		Leu	Asn	Ile	Thr 220	Arg	Ile	Val	Ser
Gly 225	Cys	Pro	Leu	Pro	Glu 230	Ala	Cys	Glu	Leu	Tyr 235	Tyr	Val	Asn	Arg	Asp 240
Thr	Leu	Phe	Cys	Tyr 245	His	Lys	Ala	Ser	Glu 250	Val	Xaa	Leu	Gln	Arg 255	Leu
Met	Ala	Leu	Tyr 260	Val	Ala	Ser	His	Tyr 265	Lys	Asn	Ser	Pro	Asn 270	Asp	Leu
Gln	Met	Leu 275	Ser	Asp	Ala	Pro	Ala 280	His	His	Leu	Phe	Cys 285	Leu	Leu	Pro
Pro	Val 290	Pro	Pro	Thr	Gln	Asn 295	Ala	Leu	Pro	Glu	Val 300	Leu	Ala	Val	Ile
Gln 305	Val	Cys	Leu	Glu	Gly 310	Glu	Ile	Ser	Arg	Gln 315	Ser	Ile	Leu	Asn	Ser 320
Leu	Ser	Arg	Gly	Lys 325	Lys	Ala	Ser	Gly	Asp 330	Leu	Ile	Pro	Trp	Thr 335	Val

Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly Arg 340 345 350

Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly

Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly
355 360 365

Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe Pro 370 375 380

Cys Leu Glu Glu Lys Val Leu Glu Thr Pro Gln Glu Ile His Thr Val 385 390 395 400

Ser Ser Glu Ala Val Ser Leu Leu Glu Glu Val Ile Thr Pro Arg Lys 405 410 415

Asp Leu Pro Pro Leu Leu Leu Lys Leu Asn Glu Arg Pro Ala Glu Arg 420 425 430

Leu Asp Tyr Leu Gly Val Ser Tyr Gly Leu Thr Pro Arg Leu Leu Lys 435 440 445

Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr Pro 450 455 460

Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu Thr 465 470 475 480

Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp Lys
485 490 495

Asp Phe Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser Thr 500 505 510

Phe Ser Pro Ser Leu Ala Xaa Asn Ile Ile Gln Asn Arg Asn Met Gly 515 520 525

Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala 530 535 540

<210> 1005

<211> 202

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400	)> 10	05													
Asp 1	Ala	Ala	Asp	Thr 5	Ile	Glu	Thr	Asp	Thr 10	Ala	Thr	Ala	Asp	Thr 15	Thr
Val	Ala	Asn	Asn 20	Val	Pro	Pro	Ala	Ala 25	Thr	Ser	Leu	Ile	Asp 30	Leu	Trp
Pro	Gly	Asn 35	Gly	Glu	Gly	Ala	Ser 40	Thr	Leu	Gln	Gly	Glu 45	Pro	Arg	Ala
Pro	Thr 50	Pro	Pro	Ser	Gly	Thr 55	Glu	Val	Thr	Leu	Ala 60	Glu	Val	Pro	Leu
Leu 65	Asp	Glu	Val	Ala	Pro 70	Glu	Pro	Leu	Leu	Pro 75	Ala	Xaa	Glu	Gly	Cys 80
Ala	Thr	Leu	Leu	Asn 85	Phe	Asp	Glu	Leu	Pro 90	Glu	Pro	Pro	Ala	Thr 95	Ph€
Суз	Asp	Pro	Glu 100	Glu	Val	Glu	Gly	Glu 105	Pro	Leu	Ala	Ala	Pro 110	Gln	Thr
Pro	Thr	Leu 115	Pro	Ser	Ala	Leu	Glu 120	Glu	Leu	Glu	Gln	Glu 125	Gln	Glu	Pro
Glu	Pro 130	His	Leu	Leu	Thr	Asn 135	Gly	Glu	Thr	Thr	Gln 140	Lys	Glu	Gly	Thi
Gln 145	Ala	Ser	Glu	Gly	Туг 150	Phe	Ser	Gln	Ser	Gln 155	Glu	Glu	Glu	Phe	Ala 160
Gln	Ser	Glu	Glu	Leu 165	Cys	Ala	Lys	Ala	Pro 170	Pro	Pro	Val	Phe	Туг 175	Asr
Lys	Pro	Pro	Glu 180	Ile	Asp	Ile	Thr	Cys 185	Trp	Asp	Ala	Asp	Pro 190	Val	Pro

<210> 1006

<211> 561

<212> PRT

<213> Homo sapiens

195

Glu Glu Glu Gly Phe Glu Gly Gly Asp

<400> 1006

Ser Ala Met Arg Lys Phe Ala Tyr Cys Lys Val Val Leu Ala Thr Ser 1 5 10 15

Leu	Ile	Trp	Val 20	Leu	Leu	Asp	Met	Phe 25	Leu	Leu	Leu	Tyr	Phe 30	Ser	Glu
Cys	Asn	Lys 35	Cys	Asp	Glu	Lys	Lys 40	Glu	Arg	Gly	Leu	Pro 45	Ala	Gly	Asp
Val	Leu 50	Glu	Pro	Val	Gln	Lys 55	Pro	His	Glu	Gly	Pro 60	Gly	Glu	Met	Gly
Lys 65	Pro	Val	Val	Ile	Pro 70	Lys	Glu	Asp	Gln	Glu 75	Lys	Met	Lys	Glu	Met 80
Phe	Lys	Ile	Asn	Gln 85	Phe	Asn	Leu	Met	Ala 90	Ser	Glu	Met	Ile	Ala 95	Leu
Asn	Arg	Ser	Leu 100	Pro	Asp	Val	Arg	Leu 105	Glu	Gly	Cys	Lys	Thr 110	Lys	Va]
Tyr	Pro	Asp 115	Asn	Leu	Pro	Thr	Thr 120	Ser	Val	Val	Ile	Val 125	Phe	His	Asr
Glu	Ala 130	Trp	Ser	Thr	Leu	Leu 135	Arg	Thr	Val	His	Ser 140	Val	Ile	Asn	Arg
Ser 145	Pro	Arg	His	Met	Ile 150	Glu	Glu	Ile	Val	Leu 155	Val	Asp	Asp	Ala	Ser 160
Glu	Arg	Asp	Phe	Leu 165	Lys	Arg	Pro	Leu	Glu 170	Ser	Tyr	Val	Lys	Lys 175	Leu
_			180					185	Glu		•		190		
		195					200		Ser			205			
	210					215			Val		220				
225					230				Thr	235					240
_				245					Tyr 250					255	
	-		260	•				265	Asn				270		
Pro	Gln	Arg	Glu	Met	Asp	Arg	Arg 280	Lys	Gly	Asp	Arg	Thr 285	Leu	Pr	Val

PCT/US00/05882

Arg	Thr 290	Pro	Thr	Met	Ala	Gly 295	Gly	Leu	Phe	Ser	Ile 300	Asp	Arg	Asp	Tyr
Phe 305	Gln	Glu	Ile	Gly	Thr 310	Tyr	Asp	Ala	Gly	Met 315	Asp	Ile	Trp	Gly	Gly 320
Glu	Asn	Leu	Glu	11e 325	Ser	Phe	Arg	Ile	Trp 330	Gln	Cys	Gly	Gly	Thr 335	Leu
Glu	Ile	Val	Thr 340	Cys	Ser	His	Val	Gly 345	His	Val	Phe	Arg	Lys 350	Ala	Thr
Pro	Tyr	Thr 355	Phe	Pro	Gly	Gly	Thr 360	Gly	Gln	Ile	Ile	Asn 365	Lys	Asn	Asn
Arg	Arg 370	Leu	Ala	Glu	Val	Trp 375	Met	Asp	Glu	Phe	180	Asn	Phe	Phe	Tyr
11e 385	Ile	Ser	Pro	Gly	Val 390	Thr	Lys	Val	Asp	Tyr 395	Gly	Asp	Ile	Ser	Ser 400
Arg	Val	Gly	Leu	Arg 405	His	Lys	Leu	Gln	Cys 410	Lys	Pro	Phe	Ser	Trp 415	Tyr
Leu	Glu	Asn	Ile 420	Tyr	Pro	Asp	Ser	Gln 425	Ile	Pro	Arg	His	Tyr 430	Phe	Ser
Leu	Gly	Glu 435	Ile	Arg	Asn	Val	Glu 440	Thr	Asn	Gln	Суз	Leu 445	Asp	Asn	Met
Ala	Arg 450	Lys	Glu	Asn	Glu	Lys 455	Val	Gly	Ile	Phe	Asn 460	Cys	His	Gly	Met
Gly 465	Gly	Asn	Gln	Val	Phe 470	Ser	Tyr	Thr	Ala	Asn 475	Lys	Glu	Ile	Arg	Thr 480
Asp	Asp	Leu	Cys	Leu 485	Asp	Val	Ser	Lys	Leu 490	Asn	Gly	Pro	Val	Thr 495	Met
Leu	Lys	Cys	His 500	His	Leu	Lys	Gly	Asn 505	Gln	Leu	Trp	Glu	Туг 510	Asp	Pro
Val	Lys	Leu 515	Thr	Leu	Gln	His	<b>Val</b> 520	Asn	Ser	Asn	Gln	Cys 525	Leu	Asp	Lys
Ala	Thr 530	Glu	Glu	Asp	Ser	Gln 535	Val	Pro	Ser	Ile	Arg 540	Asp	Cys	Asn	Gly
Ser 545	Arg	Ser	Gln	Gln	Trp 550	Leu	Leu	Arg	Asn	Val 555	Thr	Leu	Pro	Glu	Ile 560

976

Phe

<210> 1007

<211> 189

<212> PRT

<213> Homo sapiens

<400> 1007

Phe Ile Pro Ile Gly Glu Asn Ser Ala Thr Gly Glu Asn Arg Leu Ala 1 5 10 15

Ser Ala Leu Trp Ile Gly Asp Arg Ser Tyr Pro Gly Leu Ser Glu Gly 20 25 30

Asn Ser Arg Pro Pro Ile Pro Gly Pro Pro Tyr Val Ala Ser Pro Asp 35 40 45

Leu Trp Ser His Trp Glu Asp Ser Ala Leu Pro Pro Pro Ser Leu Arg
50 55 60

Pro Val Gln Pro Thr Trp Glu Gly Ser Ser Glu Ala Gly Leu Asp Trp 65 70 75 80

Ala Gly Ala Ser Phe Ser Pro Gly Thr Pro Met Trp Ala Ala Leu Asp 85 90 95

Glu Gln Met Leu Gln Glu Gly Ile Gln Ala Ser Leu Leu Asp Gly Pro 100 105 110

Ala Gln Glu Pro Gln Ser Ala Pro Trp Leu Ser Lys Ser Ser Val Ser 115 120 125

Ser Leu Arg Leu Gln Gln Leu Glu Arg Met Gly Phe Pro Thr Glu Gln 130 135 140

Ala Val Val Ala Leu Ala Ala Thr Gly Arg Val Glu Gly Ala Val Ser 145 150 155 160

Leu Leu Val Gly Gly Gln Val Gly Thr Glu Thr Leu Val Thr His Gly
165 170 175

Lys Gly Gly Pro Ala His Ser Glu Gly Pro Gly Pro Pro 180 185

<210> 1008 <211> 300

977

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1008 Arg Gln Lys Ser Ser Xaa Leu Trp Pro His Pro Leu Xaa Arg His Arg 1 5 Ala Gly Pro Gly Leu Ala Gly Asn Gly Gly Ile Leu Pro Asn Leu Gly 20 Asp Gly Gly Gly Trp Xaa Trp Trp Glu Gly Asn His Val Leu Leu 40 Asn Leu Phe Leu Val Pro Pro Ile Pro Arg Pro Thr Arg His His Thr 50 Ala Asp Asn Thr His Pro Leu Ala Gln Ala Ser Ile His Met Cys Cys . 70 Thr Phe Ser Ser Arg His Ala Asp Asn Pro Thr Arg Pro His His His 90 85 Met Pro Lys Cys Thr His Thr Glu Pro His Arg Pro Ser Gly Pro Ala 105 110 100 Gly Ser Ser Leu Gly Phe Pro Leu Ala His Phe Gln Gly Pro Gly Ala 115 Ala Thr Lys Cys Glu Ser Ser Val Ala Ala Pro Ser Phe Ser Pro Ser 140 135

Thr Ser Ile Gly Pro Ile Gly Lys His Arg Gly Leu Thr Leu Phe His

Ile Pro Cys Pro Ala Leu Lys Trp Thr Ile Thr Phe Trp Asp Arg Leu

170

175

150

165

Lys Phe Leu Lys Ser Leu His His Ser Val Pro Ser Lys Gly Ser Pro 185 180 Cys Gln Trp Gly Phe Glu Arg Glu Phe Leu Glu Pro Thr Phe Lys Phe 200 195 Cys Leu Ile Trp Arg Glu Thr Lys Ile Gly Arg Gly Lys Arg Thr Pro 215 Asp Val Leu Leu Pro Glu Ile Leu Glu Thr Asp Ser Leu Asp Trp 225 . 235 230 Lys Met Asp Lys Ser Ala Leu Thr Trp Arg Val Gly Thr Arg Trp Gly 250 245 Pro Ala Leu Pro Thr Ala Ala Val Ala Ser Ser Leu Ala Gly Phe Ala 265 Gly Arg Gln Gln Glu Gly Glu Gly Ser Thr Ala Arg Gly Thr Gly 280 Gly Ala Ala Gly Leu Gln Glu Leu Phe Phe His Cys 295 290 <210> 1009 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1009 Arg Pro Pro Cys Pro His Ser Arg Ser Xaa Trp Arg Ile Leu Ser Leu Thr Pro Asn Pro Asp Pro Leu Pro Asn Met Ser Val Phe Phe Ile 20 25 Phe Leu Asn Ile Phe Xaa Leu Ala Phe Ser Ser Pro Gly Ser Gln Pro

40

45

Leu	Leu 50	Asn	Ser	Pro	Pro	Ser 55	Phe	Val	<sub>.</sub> Cys	Trp	Ser 60		Gly	Phe	Met
Glu 65	Met	Asn	Gly	Arg	Gly 70	Glu	Ļeu	Val	Glu	Ser 75	Leu	Lys	Arg	Phe	Суs 80
Ala	Ser	Thr	Arg	Leu 85		Pro	Thr	Pro	Leu 90	Leu	Leu	Phe	Pro	Glu 95	Glu
Glu	Ala	Thr	Asn 100	Gly	Arg	Glu	Gly	Leu 105	Leu	Arg	Phe	Ser	Ser 110	Trp	Pro
Phe	Ser	Ile 115	Gln	Asp	Val	Val	Gln 120	Pro	Leu	Thr	Leu	Gln 125	Val	Gln	Arç
Pro	Leu 130	Val	Ser	Val	Thr	Val 135	Ser	Asp	Ala	Ser	Trp 140	Val	Ser	Glu	Leu
Leu 145	Trp	Ser	Leu	Phe	Val 150	Pro	Phe	Thr	Val	Туг 155	Gln	Val	Arg	Trp	Leu 160
				165				Glu	170					175	
			180				_	Glu 185					190		
		195					200	His				205			
	210				•	215		Ser			220				
225					230			Thr		235					240
				245			_	Val	250					255	
		_	260	_				Thr 265					270		
		275					280	Lys	_			285			
	290			_		295		Ser			300				
305	WIG	Leu	TNE	rne	310	гåз	ser	Ser	тгр	315	Arg	GIN	GIU	ser	320

Gln Glu Arg Lys Gln Ala Leu Tyr Glu Tyr Ala Arg Arg Arg Phe Thr 325 330 335

Glu Arg Arg Ala Gln Glu Ala Asp 340

<210> 1010

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1010

Pro His Cys Glu Pro Asn Pro Gly Ala Gly Ala Met Val Leu Leu His 1 5 10 15

Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu 20 25 30

Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu
35 40 45

Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro 50 55 60

Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu 65 70 75 80

Gly Val Val His Glu Asp Leu Arg Leu Leu Glu Thr His Leu Pro

Ser Lys Lys Lys Val Leu Leu Gly Val Gly Asp Pro Lys Ile Gly 100 105 110

Ala Ala Ile Gln Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val 115 120 125

Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val 130 135 140

Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly 145 150 155 160

His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp 165 170 175

Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp 180 185 190

Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe 195 200 205

Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu 210 215 220

Ala Gln Phe Ile Gly Asn Arg Arg Asn 225 230

<210> 1011

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1011

Gly Thr Ser Xaa Phe Ser Phe Pro Leu Gly Arg Glu Glu Ala Met Ala 1 5 10 15

Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Leu Ser Ser Leu 20 25 30

Ser Arg Cys Ser Ala Glu Ala Cys Leu Glu Pro Gln Ile Thr Pro Ser 35 40 45

Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val Phe Ile 50 55 60

Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln Asn Met Ala Leu 65 70 75 80

Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly Gln Asp 85 90 95

Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His Lys Ser Ala His
100 105 110

Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr Ser Leu 115 120 125

Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile Pro Pro 130 135 140

Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp Asn Gly Pro Trp 145 150 155 160

PCT/US00/05882

Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu Val Ile Tyr Tyr 165 170 175

Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala 180 185

<210> 1012

WO 00/55350

<211> 708

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (433)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1012

Ala Leu Arg Pro Ile Ser Ser Val Arg Ala Gly Asp Arg Cys Gln Arg 1 5 10 15

Ser Xaa Ala Ala Asp Met Ala Ala Ser Thr Ala Ala Gly Lys Gln Arg 20 25 30

Ile Pro Lys Val Ala Lys Val Lys Asn Lys Ala Pro Ala Glu Val Gln 35 40 45

Ile Thr Ala Glu Gln Leu Leu Arg Glu Ala Lys-Glu Arg Glu Leu Glu 50 55 60

Leu Leu Pro Pro Pro Pro Gln Gln Lys Ile Thr Asp Glu Glu Leu 65 70 75 80

Asn Asp Tyr Lys Leu Arg Lys Arg Lys Thr Phe Glu Asp Asn Ile Arg

90 95 85 Lys Asn Arg Thr Val Ile Ser Asn Trp Ile Lys Tyr Ala Gln Trp Glu 105 100 Glu Ser Leu Lys Glu Ile Gln Arg Ala Arg Ser Ile Tyr Glu Arg Ala 120 Leu Asp Val Asp Tyr Arg Asn Ile Thr Leu Trp Leu Lys Tyr Ala Glu 130 135 Met Glu Met Lys Asn Arg Gln Val Xaa His Ala Arg Asn Ile Trp Asp 150 155 Arg Ala Ile Thr Thr Leu Pro Arg Val Asn Gln Phe Trp Tyr Lys Tyr 170 Thr Tyr Met Glu Glu Met Leu Gly Asn Val Ala Gly Ala Arg Gln Val 180 Phe Glu Arg Trp Met Glu Trp Gln Pro Glu Glu Gln Ala Trp His Ser 200 Tyr Ile Asn Phe Glu Leu Arg Tyr Lys Glu Val Asp Arg Ala Arg Thr 215 Ile Tyr Glu Arg Xaa Val Leu Val His Pro Asp Val Lys Asn Trp Ile 225 230 235 Lys Tyr Ala Arg Phe Glu Glu Lys His Ala Tyr Phe Ala His Ala Arg 245 Lys Val Tyr Glu Arg Ala Val Glu Phe Phe Gly Asp Glu His Met Asp 265 Glu His Leu Tyr Val Ala Phe Ala Lys Phe Glu Glu Asn Gln Lys Glu 275 280 Phe Glu Arg Val Arg Val Ile Tyr Lys Tyr Ala Leu Asp Arg Ile Ser Lys Gln Asp Ala Gln Glu Leu Phe Lys Asn Tyr Thr Ile Phe Glu Lys 310 315 Lys Phe Gly Asp Arg Arg Gly Ile Glu Asp Ile Ile Val Ser Lys Arg 330 325 Arg Phe Gln Tyr Glu Glu Glu Val Lys Ala Asn Pro His Asn Tyr Asp 340 345 Ala Trp Phe Asp Tyr Leu Arg Leu Val Glu Ser Asp Ala Glu Ala Glu

		355					360					365			
Ala	Val 370	Arg	Glu	Val	Tyr	Glu 375		Ala	Ile	Ala	Asn 380	Val	Pro	Pro	Ile
Gln 385	Glu	Lys	Arg	His	Trp 390	Lys	Arg	Tyr	Ile	Туг 395		Trp	Ile	Asn	Туг 400
Ala	Leu	Tyr	Glu	Glu 405	Leu	Glu	Ala	Lys	Asp 410	Pro	Glu	Arg	Thr	Arg 415	Gln
Val	Tyr	Gln	Ala 420	Ser	Leu	Glu	Leu	Ile 425	Pro	His	Lys	Lys	Phe 430	Thr	Phe
Xaa	Lys	Met 435	Trp	Ile	Leu	Tyr	Ala 440	Gln	Phe	Glu	Ile	Arg 445	Gln	Lys	Asn
Leu	Ser 450	Leu	Ala	Arg	Arg	Ala 455	·Leu	Gly	Thr	Ser	Ile 460	Gly	Lys	Cys	Pro
Lys 465	Asn	Lys	Leu	Phe	Lys 470	Val	Tyr	Ile	Glu	Leu 475	Glu	Leu	Gln	Leu	Arg 480
Glu	Phe	Asp	Arg	Cys 485	Arg	Lys	Leu	Tyr	Glu 490	Lys	Phe	Leu	Glu	Phe 495	Gly
Pro	Glu	Asn	Cys 500	Thr	Ser	Trp	Ile	Lys 505	Phe	Ala	Glu	Leu	Gļu 510	Thr	Ile
Leu	Gly.	Asp 515	Ile	Asp	Arg.	Ala	Arg 520	Ala	Ile	Tyr	Glu	Leu 525	Ala	Ile	Ser
Gln	Pro 530	Arg	Leu	Asp	Met	Pro 535	Glu	Val	Leu	Trp	Lys 540	Ser	Tyr	Ile	Asp
Phe 545	Glu	Ile	Glu	Gln	Glu 550	Glu	Thr	Glu	Arg	Thr 555	Arg	Asn	Leu	Tyr	Arg 560
Arg	Leu	Leu	Gln	Arg 565	Thr	Gln	His	Val	Lys 570	Val	Trp	Ile	Ser	Phe 575	Ala
			580		Ser	_		585	_				590		
Gln	Ile	Tyr 595	Glu	Glu	Ala	Asn	L <b>y</b> s 6 <b>0</b> 0	Thr	Met	Arg	Asn	Cys 605	Glu	Glu	Lys
Glu	Glu 610	Arg	Leu	Met	Leu	Leu 615	Glu	Ser	Trp	Arg	Ser 620	Phe	Glu	Glu	Glu
Phe	Glv	Thr	Ala	Ser	Asp	Lvs	Glu	Arg	Val	Asp	Lys	Leu	Met	Pro	Glu

625 630 635 640 Lys Val Lys Lys Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala 650 645 Gly Trp Glu Glu Tyr Phe Asp Tyr Ile Phe Pro Glu Asp Ala Ala Asn 665 Gln Pro Asn Leu Lys Leu Leu Ala Met Ala Lys Leu Trp Lys Lys Gln 680 685 675 Gln Gln Glu Lys Glu Asp Ala Glu His His Pro Asp Glu Asp Val Asp 695 700 Glu Ser Glu Ser 705 <210> 1013 <211> 183 <212> PRT <213> Homo sapiens <400> 1013 Leu Pro Pro Gln Val Ala Asp Thr Met Leu Pro Pro Met Ala Leu Pro 10 Ser Val Ser Trp Met Leu Leu Ser Cys Leu Met Leu Leu Ser Gln Val 20 25 Gln Gly Glu Glu Pro Gln Arg Glu Leu Pro Ser Ala Arg Ile Arg Cys 40 35 Pro Lys Gly Ser Lys Ala Tyr Gly Ser His Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser Trp Thr Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro 75 70 65 Ser Gly Asn Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val 90 Ser Ser Leu Val Lys Ser Ile Gly Asn Ser Tyr Ser Tyr Val Trp Ile 105 Gly Leu His Asp Pro Thr Gln Gly Thr Glu Pro Asn Gly Glu Gly Trp 120 115 Glu Trp Ser Ser Asp Val Met Asn Tyr Phe Ala Trp Glu Arg Asn

135

.

140

Pro Ser Thr Ile Ser Ser Pro Gly His Cys Ala Ser Leu Ser Arg Ser 145 150 155 160

Thr Ala Phe Leu Arg Trp Lys Asp Tyr Asn Cys Asn Val Arg Leu Pro 165 170 175

Tyr Val Cys Lys Phe Thr Asp 180

<210> 1014

<211> 213

<212> PRT

<213> Homo sapiens

<400> 1014

Val Thr Asp Gly Gly Ser Ala Arg Lys Pro Lys Met Ala Val Pro Ala 1 5 10 15

Ala Leu Ile Leu Arg Glu Ser Pro Ser Met Lys Lys Ala Val Ser Leu 20 25 30

Ile Asn Ala Ile Asp Thr Gly Arg Phe Pro Arg Leu Leu Thr Arg Ile 35 40 45

Leu Gln Lys Leu His Leu Lys Ala Glu Ser Ser Phe Ser Glu Glu Glu 50 55 60

Glu Glu Lys Leu Gln Ala Ala Phe Ser Leu Glu Lys Gln Asp Leu His
65 70 75 80

Leu Val Leu Glu Thr Ile Ser Phe Ile Leu Glu Gln Ala Val Tyr His
85 90 95

Asn Val Lys Pro Ala Ala Leu Gln Gln Gln Leu Glu Asn Ile His Leu 100 105 110

Arg Gln Asp Lys Ala Glu Ala Phe Val Asn Thr Trp Ser Ser Met Gly
115 120 125

Gln Glu Thr Val Glu Lys Phe Arg Gln Arg Ile Leu Ala Pro Cys Lys 130 135 140

Leu Glu Thr Val Gly Trp Gln Leu Asn Teu Gln Met Ala His Ser Ala 145 150 155 160

Gln Ala Lys Leu Lys Ser Pro Gln Ala Val Leu Gln Leu Gly Val Asn 165 170 175

987

Asn Glu Asp Ser Lys Ser Leu Glu Lys Val Leu Val Glu Phe Ser His 180 185 190

Lys Glu Leu Phe Asp Phe Tyr Asn Lys Leu Glu Thr Ile Gln Ala Gln
195 200 205

Leu Asp Ser Leu Thr 210

<210> 1015

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<212> PRT

<213> Homo sapiens

<400> 1015

Ala Pro Gly Thr Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr 1 5 10 15

Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala 20 25 30

Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val 35 40 45

Ala Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg 50 55 60

Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser
65 70 75 80

Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly
85 90 95

Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His
100 105 110

Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile 115 120 125

Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro 130 135 140

Pro Leu Leu His His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn 145 150 155 160

Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met 165 170 175

Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly

Thr Ile Ile Tyr Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser Arg Ala Ser Ile Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp Glu Val Leu Ser Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu Gln Ile Met Tyr Ser Val Ser Gln Gly His Arg Pro Val Ile Asn Glu Glu Ser Leu Pro Tyr Asp Ile Pro His Arg Ala Arg Met Ile Ser Leu Ile Glu Ser Gly Trp Ala Gln Asn Pro Asp Glu Arg Pro Ser Phe Leu Lys Cys Leu Ile Glu Leu Glu Pro Val Leu Arg Thr Phe Glu Glu Ile . 295 Thr Phe Leu Glu Ala Val Ile Gln Leu Lys Lys Thr Lys Leu Gln Ser Val Ser Ser Ala Ile His Leu Cys Asp Lys Lys Met Glu Leu Ser Leu Asn Ile Pro Val Asn His Gly Pro Gln Glu Glu Ser Cys Gly Ser Ser Gln Leu His Glu Asn Ser Gly Ser Pro Glu Thr Ser Arg Ser Leu Pro Ala Pro Gln Asp Asn Asp Phe Leu Ser Arg Lys Ala Gln Asp Cys Tyr Phe Met Lys Leu His His Cys Pro Gly Asn His Ser Trp Asp Ser Thr Ile Ser Gly Ser Gln Arg Ala Ala Phe Cys Asp His Lys Thr Thr Pro Cys Ser Ser Ala Ile Ile Asn Pro Leu Ser Thr Ala Gly Asn Ser Glu Arg Leu Gln Pro Gly Ile Ala Gln Gln Trp Ile Gln Ser Lys Arg Glu Asp Ile Val Asn Gln Met Thr Glu Ala Cys Leu Asn Gln Ser Leu

455 460 450 Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu 470 475 Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp 490 Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys 500 Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu 520 Val Val Ser Arg Ser Pro Ser Leu Asn Leu Gln Asn Lys Ser Met 540 535 <210> 1016 <211> 257 <212> PRT <213> Homo sapiens <400> 1016 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile 5 10 15 Leu Gly Gln Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu 25 Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg 40 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu 50 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu 65 70 75 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His 90 Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu 110

Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Phe Gly Leu Thr

120

Leu	Arg 130	Gly	Asp	Ser	Pro	Val 135	Leu	Ile	Ala	Ala	Val 140	Ile	Pro	Gly	Ser
Gln 145	Ala	Ala	Ala	Ala	Gly 150	Leu	Lys	Glu	Gly	Asp 155	туг	Ile	Val	Ser	Val 160
Asn	Gly	Gln	Pro	Cys 165	Arg	Trp	Trp	Arg	His 170	Ala	Glu	Val	Val	Thr 175	Glu
Leu	Lys	Ala	Ala 180	Gly	Glu	Ala	Gly	Ala 185	Ser	Leu	Gln	Val	Val 190	Ser	Leu
Leu	Pro	Ser 195	Ser	Arg	Leu	Pro	Ser 200	Leu	Gly	Asp	Arg	Arg 205	Pro	Val	Leu
Leu	Gly 210	Pro	Arg	Gly	Leu	Leu 215	Arg	Ser	Gln	Arg	Glu 220	His	Gly	Cys	Lys
Thr 225	Pro	Ala	Ser	Thr	Trp 230	Ala	Ser	Pro	Arg	Ala 235	Leu	Leu	Asn	Trp	Ser 240
Arg	Lys	Ala	Gln	Gln 245	Gly	Lys	Thr	Gly	Gly 250	Cys	Pro	Ser	Pro	Val 255	Pro
Gln															
						- 0					-				
<210	)> 10	17													
	> 24														
<212	2> PF	RT													
<213	3> Hc	omo s	sapie	ens											
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Ala	Ser	Asp	Arg	Arg	Gly	Tyr	Ser	Ser	Arg	Ile	Val	Gly	Gly	Asn	Met

Ser Leu Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly 25 30

Tyr His Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr 35 40 45

Ala Ala His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile

Gln Val Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu 65 70 75 80

Val Glu Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly
85 90 95

Asn Asp Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu

Ash Asp IIe Ala Leu Met Lys Leu Ala Gly Pro Leu Inr Phe Ash Glu 100 105 110

Met Ile Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp 115 120 125

Gly Lys Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala 130 135 140

Gly Asp Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser 145 150 155 160

Asn Lys Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro 165 170 175

Ser Met Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln 180 185 190

Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys 195 200 205

Leu Val Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys 210 215 220

Pro Gly Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu 225 230 235 240

Gln Met Glu Arg Asp Leu Lys Thr 245

<210> 1018

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1018

Gly Arg Val Ser Ala Pro Val Pro Gly Lys Met Val Leu Gly Gly Cys
1 10 15

Pro Val Ser Tyr Leu Leu Cys Gly Gln Ala Ala Leu Leu Gly 20 25 30

Asn Leu Leu Leu His Cys Val Ser Arg Ser His Ser Gln Asn Ala 35 40 45

Thr Ala Glu Pro Glu Leu Thr Ser Ala Gly Ala Ala Gln Pro Glu Gly

992

50 55 60 Pro Gly Gly Ala Ala Ser Trp Glu Tyr Gly Asp Pro His Ser Pro Val Ile Leu Cys Ser Tyr Leu Pro Asp Glu Phe Ile Glu Cys Glu Asp Pro 90 Val Asp His Val Gly Asn Ala Thr Ala Ser Gln Glu Leu Gly Tyr Gly 110 100 105 Cys Leu Lys Phe Gly Gly Gln Ala Tyr Ser Asp Val Glu His Thr Ser Val Gln Cys His Ala Leu Asp Gly Ile Glu Cys Ala Ser Pro Arg Thr 135 Phe Leu Arg Glu Asn Lys Pro Cys Ile Lys Tyr Thr Gly His Tyr Phe 145 150 Ile Thr Thr Leu Leu Tyr Ser Phe Phe Leu Gly Cys Phe Gly Val Asp 170 165 Arg Phe Cys Leu Gly His Thr Gly Thr Ala Val Gly Lys Leu Leu Thr 185 Leu Gly Gly Leu Gly Ile Trp Trp Phe Val Asp Leu Ile Leu Leu Ile 195 Thr Gly Gly Leu Met Pro Ser Asp Gly Ser Asn Trp Cys Thr Val Tyr 210

<210> 1019 <211> 53

<212> PRT

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<400> 1019

Asn Val Pro Val Cys His Leu Ser Thr Trp Lys Ile Leu Tyr Ile Trp

215

Lys Val Tyr Ala Ser Leu Asn Lys Tyr Met Leu Leu Asn Lys Pro Tyr 25 20

His Ser Leu Arg Asn Cys Ile Tyr Phe Il Ile Cys Pro Phe Arg Asn 45 35 40

Gln Val Phe Cys Ile 50

<210> 1020

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1020

Phe Tyr Thr Asn Leu Ile Trp Leu Pro Phe Val Pro Leu Ile Ser Gln
1 10 15

Met Phe Lys Cys Ile Gly Phe Gly Phe Ser Met Tyr Lys Leu Pro Tyr 20 25 30

Leu Leu Met Ser Ile Phe Cys Leu Phe Asn Phe Val Tyr Leu Leu Phe 35 40 45

Cys Phe Trp Ile His Phe Leu Ile Arg Ser His Met Ile Asn Ile Ile 50 55 60

Ser Ile Val Ile Ile Pro 65 70

<210> 1021

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<211> 337

<212> PRT

<213> Homo sapiens

<400> 1021

Arg Lys Arg Lys Gln Ala Ala Arg Ala Ala Glu Glu Pro Gly Ala Ala 1 5 10 15

Met Asp Val Arg Ala Leu Pro Trp Leu Pro Trp Leu Leu Trp Leu Leu 20 25 30

Cys Arg Gly Gly Asp Ala Asp Ser Arg Ala Pro Phe Thr Pro Thr
35 40 45

Trp Pro Arg Ser Arg Glu Arg Glu Ala Ala Ala Phe Arg Glu Ser Leu 50 55 60

Asn Arg His Arg Tyr Leu Asn Ser Leu Phe Pro Ser Glu Asn Ser Thr
65 70 75 80

Ala Phe Tyr Gly Ile Asn Gln Phe Ser Tyr Leu Phe Pro Glu Glu Phe

994

				85					90					95	
Lys	Ala	Ile	Туг 100		Arg	Ser	Lys	Pro 105	Ser	Lys	Phe	Pro	Arg 110	Tyr	Ser
Ala	Glu	Val 115	His	Met	Ser	Ile	Pro 120	Asn	Val	Ser	Leu	Pro 125	Leu	Arg	Phe
Asp	Trp 130	Arg	Asp	Lys	Gln	Val 135	Val	Thr	Gln	Val	Arg 140	Asn	Gln	Gln	Met
Cys 145	Gly	Gly	Cys	Trp	Ala 150	Phe	Ser	Val	Val	Gly 155	Ala	Val	Glu	Ser	Ala 160
туг	Ala	Ile	Lys	Gly 165	Lys	Pro	Leu	Glu	Asp 170	Leu	Ser	Val	Gln	Gln 175	Val
Ile	Asp	Cys	Ser 180	Tyr	Asn	Asn	Tyr	Gly 185	Cys	Asn	Gly	Gly	Ser 190	Thr	Leu
Asn	Ala	Leu 195	Asn	Trp	Leu	Asn	Lys 200	Met	Gln	Val	Lys	Leu 205	Val	Lys	Asp
Ser	Glu 210	туг	Pro	Phe	Lys	Ala 215	Gln	Asn	Gly	Leu	Cys 220	His	Tyr	Phe	Ser
Gly 225	Ser	His	Ser	Gly	Phe 230	Ser	Ile	Lys	Gly	Tyr 235	Ser	Ala	Tyr	Asp	Phe 240
Ser	Asp	Gln	Glu	Asp 245	Glu	Met	Ala	Lys	Ala 250	Leu	Leu	Thr	Phe	Gly 255	Pro
Leu	Val	Val	11e 260	Val	Asp	Ala	Val	Ser 265	Trp	Gln	Asp	Tyr	Leu 270	Gly	Gly
Ile	Ile	Gln 275	His	His	Cys	Ser	Ser 280	Gly	Glu	Ala	Asn	His 285	Ala	Val	Leu
Ile	Thr 290	Gly	Phe	Asp	Lys	Thr 295	Gly	Ser	Thr	Pro	Tyr 300	Trp	Ile	Val	Arg
Asn 305	Ser	Trp	Gly	Ser	Ser 310	Trp	Gly	Val	Asp	Gly 315	Tyr	Ala	His	Val	Lys 320
Met	Gly	Ser	Asn	Val 325	Cys	Gly	Ile	Ala	Asp 330	Ser	Val	Ser	Ser	Ile 335	Phe

Val

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<210> 1022
<211> 134
<212> PRT
<213> Homo sapiens
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Ala Ser Ala Glu Phe Glu Met Ala Gly Gly Lys Ala Gly Lys Asp Ser
Gly Lys Ala Lys Thr Lys Ala Val Ser Arg Ser Gln Arg Ala Gly Leu
             20
Gln Phe Pro Val Gly Arg Ile His Arg His Leu Lys Ser Arg Thr Thr
                            40
Ser His Gly Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile
                        55
Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ser
                     70
                                        75
Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala
                85
Ile Arg Gly Asp Glu Glu Leu Asp Ser Leu Ile Lys Ala Thr Ile Ala
                               105
Gly Gly Val Ile Pro His Ile His Lys Ser Leu Ile Gly Lys Lys
                           120
        115
Gly Gln Gln Lys Thr Val
   130
<210> 1023
<211> 226
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<222> (33)

996

<220> ·

<221> SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1023

Gly Leu Phe Gln Thr Cys Ile His Leu Leu Thr Leu Pro Val Leu Val

His Gly Glu Leu Phe Ala Pro Pro Arg Trp Leu Arg Arg Ala Ala Gly
20 25 30

Xaa Pro Trp Thr Leu Val Thr Ser Cys Xaa Ser Leu Arg Pro Ser Gly
35 40 45

Pro Cys Pro Arg Pro Gly Arg Ala Leu Leu Pro Ser Cys Ala Pro Ala 50 55 60

Ala Arg Xaa Pro Trp Gly Gly Val Val Trp Cys Trp Glu Gly Val Leu 65 70 75 80

Gln Gly Glu Glu Asp Leu Glu Gly Leu Gly Ala Ala Val Leu Asn Arg 85 90 95

Leu Thr Leu Arg Arg Pro Leu Ser Ala Ala Leu Leu Phe Ile Thr Val

Pro His Ser Gly Arg Arg Ser Pro Val Ala Gly Gln Val Pro Met Ala 115 120 125

Cys Ser Leu Glu Pro Asp Phe Arg Cys Phe Gly Ile Arg Ser Pro Gln 130 135 140

His Arg Gln Val His Pro Ile Ile Thr Leu Pro Val Pro Gly Trp Ala 145 150 155 160

Gly Asp Ser Gly Thr Val Met Pro Gly Ala Arg Thr Ala Ala Leu Pro 165 170 175

Leu His Thr Asp Gly Leu Gly Val Ala Leu Arg Pro His Pro Thr Leu 180 185 190

Ile Ser Gly Arg Gly Ser Pro Glu Trp Ser Leu Val Arg Ala Val Ala 195 200 205

Lys Pro Ala Val Ser Phe Leu His Lys Val Pro Pro Pro Leu Ser Val 210 215 220

Ser Gly

<210> 1024 <211> 760 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (330) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1024 Gln Gly Lys Lys Arg Ala Gly Asn Phe Ala Ile Met Glu Ile Gln Cys 5 10 Pro Ala Leu Arg Lys Thr Leu Pro Ile Leu Phe Gly Ser Leu Arg Arg 25 Cys Leu Cys Leu Ser Asp Lys Tyr Ser Gln Ala Cys His Pro Leu Gly 45 35 40 Ser Lys Val Arg Arg Cys Arg Lys Pro Gly Pro Arg Asp Arg Gln Leu Thr Arg Val Asp Lys Ser Pro Glu Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu Pro Thr Met Tyr Gly Glu Ile Leu 95 90 85 Ser Pro Asn Tyr Pro Gln Ala Tyr Pro Ser Glu Val Glu Lys Ser Trp 100 105 Asp Ile Glu Val Pro Glu Gly Tyr Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn Cys Ala Tyr Asp Ser Val Gln Ile 130 135 Ile Ser Gly Asp Thr Glu Glu Gly Arg Leu Cys Gly Gln Arg Ser Ser 145 150 155 Asn Asn Pro His Ser Pro Ile Val Glu Glu Phe Gln Val Pro Tyr Asn 170 Lys Leu Gln Val Ile Ph Lys Ser Asp Phe Ser Asn Glu Glu Arg Phe 180 185 Thr Gly Phe Ala Ala Tyr Tyr Val Ala Thr Asp Il Asn Glu Cys Thr 195 200 205

Asp	Phe 210	Val	Asp	Val	Pro	Cys 215	Ser	His	Phe	Cys	Asn 220	Asn	Phe	Ile	Gly
Gly 225	Tyr	Phe	Cys	Ser	Cys 230	Pro	Pro	Glu	Tyr	Phe 235	Leu	His	Asp	Asp	Met 240
Lys	Asn	Cys	Gly	Val 245	Asn	Cys	Ser	Gly	Asp 250	Val	Phe	Thr	Ala	Leu 255	Ile
Gly	Glu	Ile	Ala 260	Ser	Pro	Asn	Tyr	Pro 265	Lys	Pro	Tyr	Pro	Glu 270	Asn	Ser
Arg	Cys	Glu 275	Tyr	Gln	Ile	Arg	Leu 280	Glu	Lys	Gly	Phe	Gln 285	Val	Val	Val
Thr	Leu 290	Arg	Arg	Glu	Asp	Phe 295	Asp	Val	Glu	Ala	Ala 300	Asp	ser	Ala	Gly
Asn 305	Cys	Leu	Asp	Ser	Leu 310	Val	Phe	Val	Ala	Gly 315	Asp	Arg	Gln	Phe	Gly 320
Pro	Tyr	Cys	Gly	His 325	Gly	Phe	Pro	Gly	Xaa 330	Leu	Asn	Ile	Glu	Thr 335	Lys
Ser	Asn	Ala	Leu 340	Asp	Ile	Ile	Phé	Gln 345	Thr	Asp	Leu	Thr	Gly 350	Gln	Lys
Lys	Gly	Trp 355	Lys	Leu	Arg	Tyr	His 360	Gly	Asp	Pro	Met	Pro 365	Суз	Pro	Lys
Glu	Asp 370	Thr	Pro	Asn	Ser	Val 375	Trp	Glu	Pro	Ala	Lys 380	Ala	Lys	Tyr	Val
Phe 385	Arg	Asp	Val	Val	Gln 390	Ile	Thr	Cys	Leu	Asp 395	Gly	Phe	Glu	Val	Val 400
Glu	Gly	Arg	Val	Gly 405	Ala	Thr	Ser	Phe	Tyr 410	Ser	Thr	Суз	Gln	Ser 415	Asn
Gly	Lys	Trp	Ser 420	Asn	Ser	Lys	Leu	Lys 425	Cys	Gln	Pro	Val	Asp 430	Cys	Gly
Ile	Pro	Glu 435	Ser	Ile	Glu	Asn	Gly 440	Lys	Val	Glu	Asp	Pro 445	Glu	Ser	Thr
Leu	Phe 450	Gly	Ser	Val	Ile	Arg 455	Tyr	Thr	Cys	Glu	Glu 460	Pro	Tyr	Tyr	Tyr
Met 465	Glu	Asn	Gly	Gly	Gly 470	Gly	Glu	Tyr	His	Cys 475	Ala	Gly	Asn	Gly	Ser 480

11.5	vul	7311	010	485	Deu	OLJ			490		270	-,0		495	
Cys	Gly	Val	Pro 500	Arg	Glu	Pro	Phe	Glu 505	Glu	Lys	Gln	Arg	Ile 510	Ile	Gly
Gly	Ser	Asp 515	Ala	Asp	Ile	Lys	Asn 520	Phe	Pro	Trp	Gln	Val 525	Phe	Phe	Asp
Asn	Pro 530	Trp	Ala	Gly	Gly	Ala 535	Leu	Ile	Asn	Glu	Tyr 540	Trp	Val	Leu	Thr
Ala 545	Ala	His	Val	Val	Glu 550	Gly	Asn	Arg	Glu	Pro 555	Thr	Met	Tyr	Val	Gly 560
Ser	Thr	Ser	Val	Gln 565	Thr	Ser	Arg	Leu	Ala 570	Lys	Ser	Lys	Met	Leu 575	Thr
			580		Ile			585					590		
		595			Phe		600					605			
_	610		-		Gly	615					620			_	
625					Asn 630					635					640
		_		645					650					655	
			660		Ala			665					670		
		675			Asp		680					685			
	690				Glu	695					700				
705	_				Val 710					715					720
				725	Ser				730					735	
ryr	Thr	Arg	Val	гÀг	Asn	TYT		745	Trp	тте	wet	тÀа	750	Tem	GIN

Glu Asn Ser Thr Pro Arg Glu Asp . 760

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<210> 1025
<211> 216
<212> PRT
<213> Homo sapiens
<220>
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<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (139)
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                                     10
Ala Pro Arg Thr Gly Met Leu Leu Gly Leu Ala Ala Met Glu Leu Lys
                                 25
Val Trp Val Asp Gly Ile Gln Arg Val Val Cys Gly Val Ser Glu Gln
                                                 45
         35
                             40
Thr Thr Cys Gln Glu Val Val Ile Ala Leu Ala Gln Ala Ile Gly Gln
     50
Thr Gly Arg Phe Val Leu Val Gln Arg Leu Arg Glu Lys Glu Arg Gln
Leu Leu Pro Gln Glu Cys Pro Val Gly Ala Gln Ala Thr Cys Gly Gln
                                     90
                                                         95
                 85
Phe Ala Ser Asp Val Gln Phe Val Leu Arg Arg Thr Gly Pro Ser Leu
            100
                                105
Ala Gly Xaa Pro Ser Ser Asp Ser Cys Pro Pro Pro Glu Arg Cys Leu
                            120
Ile Arg Ala Ser Leu Pro Val Lys Pro Arg Xaa Ala Leu Gly Cys Glu
                        135
    130
Pro Arg Lys Thr Leu Thr Pro Glu Pro Ala Pro Ser Leu Ser Arg Pro
145
                    150
                                        155
                                                            160
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Gly Pro Ala Ala Cys Glu His Pro His Gln Ala Ala Ala Gln Thr Cys 165 170 175 Gly Ala Trp Ser Ser Gly Cys Arg Gly Met Leu Arg Ser Trp Ala Met 185 180 Arg Pro Ser Gly Ser Lys Ser Cys Ala Gly Ser Arg Pro Gly Ser Glu 200 205 Arg Asp Arg His Ala Cys Arg His <210> 1026 <211> 604 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (303) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (359) <223> Xaa equals any of the naturally occurring L-amino acids Gly Thr Ser Ser Asp Ile Leu Lys Gly Asn Phe Ser Ile Arg Thr Ala Lys Met Gln Gln His Val Cys Glu Thr Ile Ile Arg Ile Phe Lys Arg His Gly Ala Val Gln Leu Cys Thr Pro Leu Leu Pro Arg Asn Arg 35 Gln Ile Tyr Glu His Asn Glu Ala Ala Leu Phe Met Asp His Ser Gly Met Leu Val Met Leu Pro Phe Asp Leu Arg Ile Pro Phe Ala Arg Tyr 75 70 Val Ala Arg Asn Asn Ile Leu Asn Leu Lys Arg Tyr Cys Ile Glu Arg

Val Phe Arg Pro Arg Lys Leu Asp Arg Phe His Pro Lys Glu Leu Leu 105

100

Glu	Cys	Ala 115		Asp	Ile	Val	Thr 120	Ser	Thr	Thr	Asn	Ser 125	Phe	Leu	Pro
Thr	Ala 130	Glu	Ile	Ile	Tyr	Thr 135	Ile	Tyr	Glu	Ile	11e 140	Gln	Glu	Phe	Pro
Ala 145	Leu	Gln	Glu	Arg	Asn 150	Туr	Ser	Ile	Tyr	Leu 155	Asn	His	Thr	Met	Leu 160
Leu	Lys	Ala	Ile	Leu 165	Leu	His	Cys	Gly	Ile 170	Pro	Glu	Asp	Lys	Leu 175	Ser
Gln	Val	Tyr	11e 180	Ile	Leu	Туr	Asp	Ala 185	Val	Thr	Glu	Lys	Leu 190	Thr	Arg
Arg	Glu	Val 195	Glu	Ala	Lys	Phe	Cys 200	Asn	Leu	Ser	Leu	Ser 205	Ser	Asn	Ser
Leu	Cys 210	Arg	Leu	Tyr	Lys	Phe 215	Ile	Glu	Gln	Lys	Gly 220	Asp	Leu	Gln	Asp
Leu 225	Met	Pro	Thr	Ile	Asn 230	Ser	Leu	Ile	Lys	Gln 235	Lys	Thr	Gly	Ile	Ala 240
Gln	Leu	Val	Lys	Tyr 245	Gly	Leu	Lys	Asp	Leu 250	Glu	Glu	Val	Val	Gly 255	Leu
Leu	Lys	Lys	Leu 260	Gly	Ile	Lys	Leu	Gln 265	Val	Leu	Ile	Asn	Leu 270	Gly	Leu
Val	Tyr	Lys 275	Val	Gln	Gln	His	Asn 280	Gly	Ile	Ile	Phe	Gln 285	Phe	Val	Ala
Phe	Ile 290	Lys	Arg	Arg	Gln	Arg 295	Ala	Val	Pro	Glu	Ile 300	Leu	Ala	Xaa	Gly
Gly 305	Arg	Tyr	Asp	Leu	Leu 310	Ile	Pro	Gln	Phe	Arg 315	Gly	Pro	Gln	Ala	Leu 320
Gly	Pro	Val	Pro	Thr 325	Ala	Ile	Gly	Val	ser 330	Ile	Ala	Ile	Asp	Lys 335	Ile
Ser	Ala	Ala	Val 340	Leu	Asn	Met	Glu	Glu 345	Ser	Val	Thr	Ile	Ser 350	Ser	Суз
Asp	Leu	Leu 355	Val	Val	Ser	Xaa	Gly 360	Gln	Met	Ser	Met	Ser 365	Arg	Ala	Ile
Asn	Leu 370	Thr	Gln	Lys	Leu	Trp 375	Thr	Ala	Gly	Ile	Thr 380	Ala	Glu	Ile	Met

Tyr 385	Asp	Trp	Ser	Gln	Ser 390	Gln	Glu	Glu	Leu	Gln 395	Glu	Tyr	Суѕ	Arg	His 400
His	Glu	Ile	Thr	Tyr 405	Val	Ala	Leu	Val	Ser 410	Asp	Lys	Glu	Gly	Ser 415	His
Val	Lys	Val	Lys 420	Ser	Phe	Glu	Lys	Glu 425	Arg	Gln	Thr	Glu	Lys 430	Arg	Val
Leu	Glu	Thr 435	Glu	Leu	Val	Asp	His 440	Val	Leu	Gln	Lys	Leu 445	Arg	Thr	Lys
	450					455			Ala		460				
465					470				Ala	475					480
				485					Ser 490					495	
			500					505	Glu				510		
		515					520		Gln			525			
	530					535			Thr		540				
545					550				Phe	555					560
				565					Туr 570					575	
			580					585	Lys			val	590	rne	Leu
Tyr	ser	Tyr	Arg	Asp	Asp	-	Tyr	Arg	Ile	ren	rne				

<210> 1027

<211> 459

<212> PRT

<213> Homo sapiens

	1> S						•								
	2> (	•													
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<40	0> 1	027													
Thr 1	Ser	Cys	Gly	Ile 5	Asn	Thr	Lys	Phe	Thr 10	Ser	Lys	Glu	Pro	Ile 15	Phe
Leu	Thr	Gln	Leu 20	Leu	His	Phe	Ser	Asn 25	Leu	Xaa	Gln	Glu	Tyr 30	Lys	Ile
Asn	Ser	Arg 35	Leu	Leu	Gln	Asn	Ile 40	Leu	Asp	Ala	Gly	Phe 45	Gln	Met	Pro
Thr	Pro 50	Ile	Gln	Met	Gln	Ala 55	Ile	Pro	Val	Met	Leu 60	His	Gly	Arg	Glu
Leu 65	Leu	Ala	Ser	Ala	Pro 70	Thr	Gly	Ser	Gly	Lys 75	Thr	Leu	Ala	Phe	Se1
Ile	Pro	Ile	Leu	Met 85	Gln	Leu	Lys	Gln	Pro 90	Ala	Asn	Lys	Gly	Phe 95	Arç
Ala	Leu	Ile	Ile 100	Ser	Pro	Thr	Arg	Glu 105	Leu	Ala	Ser	Gln	Ile 110	His	Arq
Glu	Leu	11e	Lys	Ile	Ser	Glu	Gly 120	Thr	Gly	Phe	Arg	Ile 125	His	Met	Ile
His	Lys 130	Ala	Ala	Val	Ala	Ala 135	Lys	Lys	Phe	Gly	Pro 140	Lys	Ser	Ser	Lys
Lys 145	Phe	Asp	Ile	Leu	Val 150	Thr	Thr	Pro	Asn	Arg 155	Leu	Ile	Tyr	Leu	Le:
Lys	Gln	Asp	Pro	Pro 165	Gly	Ile	Asp	Leu	Ala 170	Ser	Val	Glu	Trp	Leu 175	Va]
Val	Asp	Glu	Ser 180	Asp	Lys	Leu	Phe	Glu 185	Asp	Gly	Lys	Thr	Gly 190	Phe	Arg
Asp	Gln	Leu 195	Ala	Ser	Ile	Phe	Leu 200	Ala	Cys	Thr	Ser	His 205	Lys	Val	Arg
Arg	Ala 210	Met	Phe	Ser	Ala	Thr 215	Phe	Ala	Tyr	Asp	Val 220	Glu	Gln	Trp	Суз
Lys 225	Leu	Asn	Leu	Asp	Asn 230	Val	Ile	Ser	Val	Ser 235	Ile	Gly	Ala	Arg	Asr 240
Ser	Ala	Val	Glu	Thr	Val	Glu	Gln	Glu	Leu	Leu	Phe	Val	Gly	Ser	Glu

1005

245 250 255 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn 265 Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu 280 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala 295 300 290 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala 315 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile 325 330 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser 345 340 Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn 360 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu 375 380 Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu 395 385 390 Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Met 410 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys 425 Phe Leu Glu Lys Ala Lys Asp Lys Gln Lys Lys Val Thr Gly Gln Asn 440 445 435 Ser Lys Lys Val Ala Leu Glu Asp Lys Ser 455 450

<210> 1028

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1028

Gln Arg Gly Phe Tyr Ala Asn Ala Leu Thr Ser Ala Leu Gly Asn Glu

1 5 10 15

1006

Arg Val Thr Ser Ala Ser Ser Leu Ala Ser Phe Leu Val Leu Glu Arg 20 25 30

Leu Thr Asn Val Cys His Ser His Lys Cys Phe Glu Leu Asp Leu Cys
35 40 45

Asp Leu Cys Phe Phe Ser Phe Ser Leu Glu Ser Glu Tyr His Cys Leu 50 55 60

Pro Pro Arg Ser 65

<210> 1029

<211> 215

<212> PRT

<213> Homo sapiens

<400> 1029

Tyr Pro Leu Thr Pro Ala Pro Ala Pro His Asp Pro Ser Pro Arg Ala 1 5 . 10 15

His Gly Arg Gly Asp Asp Val Thr Gln Ala Thr Ala Leu Thr Ser His 20 25 30

Ile Thr Val Val Met Ala Ser Arg Gly His Val Asp Val Thr Lys Arg
35 40 45

Tyr Ser Asp Gly Val Val Gln Met Gln His Val Ala His Arg His Gly 50 55 60

Glu Leu Gly Met Thr Ser His Arg Asp Ala Ala Thr Thr Ser Arg Ala
65 70 75 80

Met Ser Thr Ser His Ile Leu Met Ser His Arg Arg Gly Asp Gly Ile 85 90 95

Thr Gln Thr Val Met Met Ser His Thr Asp Thr Val Thr Thr His Thr 100 105 110

Met Thr Thr Pro Ile Asp Met Ala Pro Thr Ser His Ala Arg Met 115 120 125

Pro Phe His Thr His Phe Leu Pro Asn Ser His Leu Val Ser Arg Ser 130 135 140

Pro Asp Pro Gly Thr Arg Ala Lys Val Pro Thr Gly Ser His Pro Leu 145 150 155 160

Pro His Ser Pro Gly Pro Gln His Leu Pro Ser Ser Ser Phe Leu Ala 165 170 175

Ser Gln Pro Leu Pro His Pro Gln Cys Leu Asp Pro Glu Val Arg Thr 180 185 190

Gly Ser His Ser Pro Pro Leu Leu Glu Arg Glu Cys Phe Gln Asp Pro 195 200 205

Leu Gly Ala Leu Ser Arg Gly 210 215

<210> 1030

<211> 297

<212> PRT

<213> Homo sapiens

<400> 1030

Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg 1 5 10 15

Val Arg Pro Arg Val Arg Pro Arg Val Arg Trp Thr Ala Ala Met Arg
20 25 30

Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu Ala Leu 35 40 45

Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp Glu Gln 50 55 60

Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu Thr Lys
65 70 75 80

Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys Phe Phe 85 90 95

Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu Ile Met 100 105 110

Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser Leu Phe 115 120 125

Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg Ile Val 130 135 140

Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu Val Ser 145 150 155 160

Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys

1008

· 170 165 175 Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala 185 180 His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu 210 215 Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr 235 225 230 Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser Ser 250 Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp Pro Gln 260 270 Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys Leu Tyr 280 Gly Lys Arg Ser Asn Ser Arg Lys Lys 295 290 <210> 1031 -<211> 571 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (484) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1031 Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe 5 . 10

His	Cys	Leu	Pro 20	Cys	Pro	Pro	Arg	Tyr 25	Arg	Gly	Asn	Gln	Pro 30	Val	Gly
Val	Gly	Leu 35	Glu	Ala	Ala	Lys	Thr 40	Glu	Lys	Gln	Xaa	Cys 45	Glu	Pro	Glu
Asn	Pro 50	Cys	Lys	Asp	Lys	Thr 55	His	Asn	Cys	His	Lys 60	His	Ala	Glu	Cys
Ile 65	Tyr	Leu	Gly	His	Phe 70	Sėr	Asp	Pro	Met	Tyr 75	Lys	Cys	Glu	Суз	Glr 80
Xaa	Gly	туr	Ala	Gly 85	Asp	Gly	Leu	Ile	Cys 90	Gly	Glu	Asp	Ser	Asp 95	Leu
qeA	Gly	Trp	Pro 100	Asn	Leu	Asn	Leu	Val 105	Cys	Ala	Thr	Asn	Ala 110	Thr	Tyr
His	Суз	Ile 115	Lys	Asp	Asn	Cys	Pro 120	His	Leu	Pro	Asn	Ser 125	Gly	Gln	Glu
Asp	Phe 130	Asp	Lys	Asp	Gly	Ile 135	Gly	Asp	Ala	Cys	Asp 140	Asp	Asp	Asp	Asp
145	-	-			150					155	Gln				160
Pro	Arg	Gln	Ala	Asp 165	Tyr	Asp	Lys	Asp	Glu 170	Val	Gly	Asp	Arg	Cys 175	Asp
			180					185			Asp		190		
_		195					200				Gly	205			
	210		_			215					Thr 220				
Thr 225	Asp	Gly	Asp	Gly	Val 230	Gly	Asp	His	Cys	Asp 235	Asn	Cys	Pro	Leu	Val 240
			-	245					250		Leu			255	
			260					265			His		270		
Asp	Asn	Cys	Pro	Tyr	Ile		Asn 280	Ala	Asn	Gln	Ala	Asp 285	His	Asp	Arg

Asp	290	GIn	GIÀ	Asp	Ala	295	Asp	Pro	Asp	Asp	300	Asn	Asp	GIĄ	vaı
Pro 305	Asp	Asp	Arg	Asp	Asn 310	Cys	Arg	Leu	Val	Phe 315	Asn	Pro	Asp	Gln	Glu 320
Asp	Leu	Asp	Gly	Asp 325	Gly	Arg	Gly	Asp	11e 330	Суз	Lys	Asp	Asp	Phe 335	Asp
Asn	Asp	Asn	Ile 340	Pro	Asp	Ile	Asp	Asp 345	Val	Суз	Pro	Glu	Asn 350	Asn	Ala
Ile	Ser	Glu 355	Thr	Asp	Phe	Arg	<b>A</b> sn 360	Phe	Gln	Met	Val	Pro 365	Leu	Asp	Pro
Lys	Gly 370	Thr	Thr	Gln	Ile	Asp 375	Pro	Asn	Trp	Val	Ile 380	Arg	His	Gln	Gly
385			Val		390					395					400
			Phe	405					410					415	
			Asp 420					425					430		
		435	Phe				440					445			
	450		Gln			455					460				
465			Asn		470					475					480
			Xaa	485					490					495	
			Asn 500					505					510		
		515	Arg				520					525			
	530		Val			535			•		540				
Ala 545	Gly	Gly	Arg	Leu	Gly 550	Leu	Phe	Val	Phe	Ser 555	Gln	Glu	Met	Val	Tyr 560

PCT/US00/05882

Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Ile 565 570

<210> 1032

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1032

Gly Arg Gly Thr Ala Thr Phe Pro Thr Gly His Glu Phe Val Gly Pro 1 5 10 15

Cys Leu Gly Arg Ala Glu Ala Phe Trp Arg Ser Lys Met Gly Arg Lys
20 25 30

Asp Ala Ala Thr Ile Lys Leu Pro Val Asp Gln Tyr Arg Lys Gln Ile 35 40 45

Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu Arg Ala Thr Lys 50 55 60

Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile Lys Glu Val Gly 65 70 75 80

Leu Val Leu Ala Ala Ile Leu Ala Leu Leu Leu Ala Phe Tyr Ala Phe 85 90 95

Phe Tyr Leu Arg Leu Thr Thr Asp Val Asp Pro Asp Leu Asp Gln Asp

Glu Asp

<210> 1033

<211> 243

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 1033
- His Arg Arg Asp Glu Ala Leu Gln Ser Leu Arg Phe Arg Arg Pro 1 5 10 15
- Gly Ala Gln Ala Ala Asp Ala Cys Gly Pro Arg Ala Asp Leu Gly Gly
  20 25 30
- Pro Arg Glu Pro Ala Ala Gly Gly Arg Ala Ala Trp His Arg Pro Ala 35 40 45
- Ala Arg Gly Gln Ser Pro Arg Arg Cys His Ala Gly Val His Arg Ser 50 55 60
- Gln Cys His Leu Cys Arg Leu Gly Ala Ala Glu Arg Phe Arg Gly Ile 65 70 75 80
- Val Ala Leu Leu Ala Ser Arg Xaa Leu Leu Arg Pro Pro Leu His Trp
  85 90 95
- Val Leu Leu Ala Xaa Ala Leu Val Asn Leu Leu Leu Ser Val Ala Cys 100 105 110
- Ser Leu Gly Leu Leu Leu Ala Val Ser Leu Thr Val Ala Asn Gly Gly
  115 120 125
- Arg Arg Leu Ile Ala Asp Cys His Pro Gly Leu Leu Asp Pro Leu Val 130 135 140
- Pro Leu Asp Glu Gly Pro Gly His Thr Asp Cys Pro Phe Asp Pro Thr 145 150 155 160
- Arg Ile Tyr Asp Thr Ala Leu Ala Leu Trp Ile Pro Ser Leu Leu Met 165 170 175
- Ser Ala Gly Glu Ala Ala Leu Ser Gly Tyr Cys Cys Val Ala Ala Leu 180 185 190
- Thr Leu Arg Gly Val Gly Pro Cys Arg Lys Asp Gly Leu Gln Gly Gln
  195 200 205
- Leu Glu Glu Met Thr Glu Leu Glu Ser Pro Lys Cys Lys Arg Gln Glu 210 215 220
- Asn Glu Gln Leu Leu Asp Gln Asn Gln Glu Ile Arg Ala Ser Gln Arg 225 230 235 240

Ser Trp Val

PCT/US00/05882

<210> 1034 <211> 173 <212> PRT <213> Homo sapiens <400> 1034 Tyr Thr Trp His Ser Glu Lys Met Asp Leu Lys Asp Lys Asn Gly Gly Pro Gly Arg Cys Asn Ser His Arg Leu Lys Val Ser Ser Gly Leu Cys Lys Thr His Glu Ile Gly Phe Asp Pro Leu Ala Leu Lys Cys Pro Leu 40 Arg Ser Arg Thr Ala Pro Trp Trp Pro Leu Asp Arg Val Ser Phe Asp 55 Leu His His Leu Val Ile Gly Asn Phe Phe Val Gly Asn Arg Lys Ile Phe Leu Asp Tyr Leu Val Tyr Gly Phe Ala His Asn Asn Arg Trp Lys Leu Leu Val Gln Ser Trp Ser Asp Gly Cys Val His Arg Thr Phe Gly 105 100 Leu Val Lys Ser Phe Ser Lys Ala Ser Phe Cys Ile Phe Ile Thr Lys 115 120 Gln Arg Lys Ser Ser Glu Asp Leu Ala Leu Lys Gln Ile Cys Ala Asn 135 Thr Ala Arg Val Ile Leu Lys Leu Lys His Phe His Phe Val Ser Tyr 145 150 Met Cys Thr Phe Leu Phe Thr Cys Glu Asn Gly His Leu 165 170

<210> 1035 <211> 241 <212> PRT <213> Homo sapiens

1014

Phe Thr Phe Asn Phe Leu Phe Trp Leu Cys Gly Ile Leu Ile Leu Ala 20 Leu Ala Ile Trp Val Arg Val Ser Asn Asp Ser Gln Ala Ile Phe Gly 40 Ser Glu Asp Val Gly Ser Ser Ser Tyr Val Ala Val Asp Ile Leu Ile Ala Val Gly Ala Ile Ile Met Ile Leu Gly Phe Leu Gly Cys Cys Gly 70 Ala Ile Lys Glu Ser Arg Cys Met Leu Leu Leu Phe Phe Ile Gly Leu 90 85 Leu Leu Ile Leu Leu Gln Val Ala Thr Gly Ile Leu Gly Ala Val 105 Phe Lys Ser Lys Ser Asp Arg Ile Val Asn Glu Thr Leu Tyr Glu Asn 115 120 Thr Lys Leu Leu Ser Ala Thr Gly Glu Ser Glu Lys Gln Phe Gln Glu 135 130 Ala Ile Ile Val Phe Gln Glu Glu Phe Lys Cys Cys Gly Leu Val Asn 155 150 Gly Ala Ala Asp Trp Gly Asn Asn Phe Gln His Tyr Pro Glu Leu Cys 170 175 165 Ala Cys Leu Asp Lys Gln Arg Pro Cys Gln Ser Tyr Asn Gly Lys Gln 185 Val Tyr Lys Glu Thr Cys Ile Ser Phe Ile Lys Asp Phe Leu Ala Lys Asn Leu Ile Ile Val Ile Gly Ile Ser Phe Gly Leu Ala Val Ile Glu 210 215 Ile Leu Gly Leu Val Phe Ser Met Val Leu Tyr Cys Gln Ile Gly Asn

235

230

Lys

225

<210> 1036

<211> 335

<212> PRT

WO 00/55350

<21	3> н	omo :	sapi	ens											
<22	1> s: 2> (:	3)	qual	s an	y of	the	nati	ural:	ly o	ccur:	ring	L-aı	mino	acio	ds
	0> 10														
Pro 1	Thr	Xaa	Gly	Arg 5	Ala	Glu	Glu	Ala	Lys 10	Met	Ala	Ala	Ala	Ala 15	Ala
Ser	Leu	Arg	Gly 20	Val	Val	Leu	Gly	Pro 25	Arg	Gly	Ala	Gly	Leu 30	Pro	G1
Ala	Arg	Ala 35	Arg	Gly	Leu	Leu	Cys 40	Ser	Ala	Arg	Pro	Gly 45	Gln	Leu	Pro
Leu	Arg 50	Thr	Pro	Gln	Ala	Val 55	Ala	Leu	Ser	Ser	Lys 60	Ser	Gly	Leu	Se
Arg 65	Gly	Arg	Lys	Val	Met 70	Leu	Ser	Ala	Leu	Gly 75	Met	Leu	Ala	Ala	G1;
Gly	Ala	Gly	Leu	Ala 85	Val	Ala	Leu	His	Ser 90	Ala	Val	Ser	Ala	Ser 95	Asj
Leu	Glu	Leu	His 100	Pro	Pro	Ser	Tyr	Pro 105	Trp	Ser	His	Arg	Gly 110	Leu	Le
Ser	Ser	Leu 115	Asp	His	Thr	Ser	Ile 120	Arg	Arg	Gly	Phe	Gln 125	Val	Tyr	Lys
Gln	Val 130	Cys	Ala	Ser	<sub>.</sub> Cys	His 135	Ser	Met	Asp	Phe	Val 140	Ala	туг	Arg	His
Leu 145	Val	Gly	Val	Cys	Tyr 150	Thr	Glu	Asp	Glu	Ala 155	Lys	Glu	Leu	Ala	Ala 160
Glu	Val	Glu	Val	Gln 165	Asp	Gly	Pro	Asn	Glu 170	Asp	Gly	Glu	Met	Phe 175	Met
Arg	Pro	Gly	Lys 180	Leu	Phe	Asp	Tyr	Phe 185	Pro	Lys	Pro	Tyr	Pro 190	Asn	Sei
Glu	Ala	Ala 195	Arg	Ala	Ala	Asn	Asn 200	Gly	Ala	Leu	Pro	Pro 205	Asp	Leu	Sei
Fyr	Ile 210	Val	Arg	Ala	Arg	His 215	Gly	Gly	Glu	Asp	Tyr 220	Val	Phe	Ser	Let

Leu Thr Gly Tyr Cys Glu Pro Pro Thr Gly Val Ser Leu Arg Glu Gly

1016

240 225 230 235 Leu Tyr Phe Asn Pro Tyr Phe Pro Gly Gln Ala Ile Ala Met Ala Pro 250 Pro Ile Tyr Thr Asp Val Leu Glu Phe Asp Asp Gly Thr Pro Ala Thr 265 Met Ser Gln Ile Ala Lys Asp Val Cys Thr Phe Leu Arg Trp Ala Ser 275 280 Glu Pro Glu His Asp His Arg Lys Arg Met Gly Leu Lys Met Leu Met 295 Met Met Ala Leu Leu Val Pro Leu Val Tyr Thr Ile Lys Arg His Lys 315 - 320 Trp Ser Val Leu Lys Ser Arg Lys Leu Ala Tyr Arg Pro Pro Lys 325 <210> 1037 <211> 511 <212> PRT <213> Homo sapiens <400> 1037 His Gln Leu Gln Gly Pro Leu Pro Leu Arg Ala Leu Pro Trp His Ser 1 . 5 10 Ser Arg Ser Arg Val Thr Cys Thr Arg Cys Phe Ser Trp Met His Pro Ser Pro Met His Pro Leu Arg Ala Gly Ser Lys Ser Gln Gly Ser Arg 40 Ser Pro Ala Pro Ser Pro Met Arg Ala Ala Asn Arg Ser His Ser Ala 50 55 Gly Arg Thr Pro Gly Arg Thr Pro Gly Lys Ser Ser Ser Lys Val Gln Thr Thr Pro Ser Lys Pro Gly Gly Asp Arg Tyr Ile Pro His Arg Ser Ala Ala Gln Met Glu Val Ala Ser Phe Leu Leu Ser Lys Glu Asn Gln 105 100 Pro Glu Asn Ser Gln Thr Pro Thr Lys Lys Glu His Gln Lys Ala Trp 115 . 120

Ala	Leu 130	Asn	Leu	Asn	Gly	Phe 135	Asp	Val	Glu	Glu	Ala 140	Lys	Ile	Leu	Arg
Leu 145	Ser	Gly	Lys	Pro	Gln 150	Asn	Ala	Pro	Glu	Gly 155	Tyr	Gln	Asn	Arg	Leu 160
Lys	Val	Leu	туг	ser 165	Gln	Lys	Ala	Thr	Pro 170	Gly	Ser	Ser	Arg	Lys 175	Thr
Cys	Arg	Tyr	Ile 180	Pro	Ser	Leu	Pro	Asp 185	Arg	Ile	Leu	Asp	Ala 190	Pro	Glu
Ile	Arg	Asn 195	Asp	Tyr	Tyr	Leu	Asn 200	Leu	Val	Asp	Trp	Ser 205	Ser	Gly	Asn
Val	Leu 210	Ala	Val	Ala	Leu	Asp 215	Asn	Ser	Val	Tyr	Leu 220	Trp	Ser	Ala	Ser
Ser 225	Gly	Asp	Ile	Leu	Gln 230	Leu	Leu	Gln	Met	Glu 235	Gln	Pro	Gly	Glu	Tyr 240
Ile	Ser	Ser	Val	Ala 245	Trp	Ile	Lys	Glu	Gly 250	Asn	Tyr	Leu	Ala	Val 255	Gly
Thr	Ser	Ser	Ala 260	Glu	Val	Gln	Leu	Trp 265	Asp	Val	Gln	Gln	Gln 270	Lys	Arg
Leu	Arg	Asn 275	Met	Thr	Ser	His	Ser 280	Ala	Arg	Val	Gly	Ser 285	Leu	Ser	Trp
Asn	Ser 290	Tyr	Ile	Leu	Ser	Ser 295	Gly	Ser	Arg	Ser	Gly 300	His	Ile	His	His
His 305	Asp	Val	Arg	Val	Ala 310	Glu	His	His	Val	Ala 315	Thr	Leu	Ser	Gly	His 320
Ser	Gln	Glu	Val	Cys 325	Gly	Leu	Arg	Trp	Ala 330	Pro	Asp	Gly	Arg	His 335	Leu
Ala	Ser	Gly	Gly 340	Asn	Asp	Asn	Leu	Val 345	Asn	Val	Trp	Pro	Ser 350	Ala	Pro
Gly	Glu	Gly 355	Gly	Trp	Val	Pro	Leu 360	Gln	Thr	Phe	Thr	Gln 365	His	Gln	Gly
Ala	Val 370	Lys	Ala	Val	Ala	Trp 375	Cys	Pro	Trp	Gln	Ser 380	Asn	Val	Leu	Ala
Thr 385	Gly	Gly	Gly	Thr	Ser 390	Asp	Arg	His	Ile	Arg 395	Ile	Trp	Asn	Val	Cys 400

460

Ser Gly Ala Cys Leu Ser Ala Val Asp Ala His Ser Gln Val Cys Ser 405

Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe 420

Ala Gln Asn Gln Leu Val Ile Trp Lys Tyr Pro Thr Met Ala Lys Val 435

Ala Glu Leu Lys Gly His Thr Ser Arg Val Leu Ser Leu Thr Met Ser

Pro Asp Gly Ala Thr Val Ala Ser Ala Ala Ala Asp Glu Thr Leu Arg 465 470 475 480

455

Leu Trp Arg Cys Phe Glu Leu Asp Pro Ala Arg Arg Arg Glu Arg Glu 485 490 495

Lys Ala Ser Ala Ala Lys Ser Ser Leu Ile His Gln Gly Ile Arg 500 505 510

<210> 1038 <211> 209 <212> PRT <213> Homo sapiens

<400> 1038

450

His Glu Pro Pro Ser Ala Ser Ser Val Ala Gly Asp Leu Gly Arg Gly
1 5 10 15

Thr Arg Thr Glu Val Glu Ala Arg Ala Ala Arg Pro Gly Ala Glu Ser 20 25 30

Ala Pro Ala Ala Ala Met Pro Asp Ser Trp Asp Lys Asp Val Tyr Pro
35 40 45

Glu Pro Pro Arg Arg Thr Pro Val Gln Pro Asn Pro Ile Val Tyr Met 50 55 60

Met Lys Ala Phe Asp Leu Ile Val Asp Arg Pro Val Thr Leu Val Arg 65 70 75 80

Glu Phe Ile Glu Arg Gln His Ala Lys Asn Arg Tyr Tyr Tyr Tyr His

Arg Gln Tyr Arg Arg Val Pro Asp Ile Thr Glu Cys Lys Glu Glu Asp 100 105 110

Ile Met Cys Met Tyr Glu Ala Glu Met Gln Trp Lys Arg Asp Tyr Lys
115 120 125

Val Asp Gln Glu Ile Ile Asn Ile Met Gln Asp Arg Leu Lys Ala Cys 130 135 140

Gln Gln Arg Glu Gly Gln Asn Tyr Gln Gln Asn Cys Ile Lys Glu Val 145 150 155 160

Glu Gln Phe Thr Gln Val Ala Lys Ala Tyr Gln Asp Arg Tyr Gln Asp 165 170 175

Leu Gly Ala Tyr Ser Ser Ala Arg Lys Cys Leu Ala Lys Gln Arg Gln 180 185 190

Arg Met Leu Gln Glu Arg Lys Ala Ala Lys Glu Ala Ala Ala Ala Thr 195 200 205

Ser

<210> 1039

<211> 219

<212> PRT

<213> Homo sapiens

<22'0>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1039

Leu Ala Ala Pro Asp Leu Ser Lys Pro Arg Gly Tyr His Trp Asp Thr 1 5 10 15

Ser Asp Trp Met Pro Ser Val Pro Leu Pro Asp Ile Gln Glu Phe Pro 20 25 30

Asn Tyr Glu Val Ile Asp Glu Gln Thr Pro Leu Tyr Ser Ala Asp Pro 35 40 45

Asn Ala Ile Asp Thr Asp Tyr Tyr Pro Gly Gly Tyr Asp Ile Glu Ser 50 55 60

Asp Phe Pro Pro Pro Pro Glu Asp Phe Pro Ala Ala Asp Glu Leu Pro 65 70 75 80

Pro Leu Pro Pro Glu Phe Ser Asn Gln Phe Glu Ser Ile His Pro Pro 85 90 95

Arg Asp Met Pro Ala Ala Gly Ser Leu Gly Ser Ser Ser Arg Asn Arg 110 100 105 Gln Arg Phe Asn Leu Asn Gln Tyr Leu Pro Asn Phe Tyr Pro Leu Asp 120 115 Met Ser Glu Pro Gln Thr Lys Gly Thr Gly Glu Asn Ser Thr Cys Arg 135 Glu Pro His Ala Pro Tyr Pro Pro Xaa Tyr Gln Arg His Phe Glu Ala 150 155 Pro Ala Val Glu Ser Met Pro Met Ser Val Tyr Ala Ser Thr Ala Ser 165 Cys Ser Asp Val Ser Ala Cys Cys Glu Val Glu Ser Glu Val Met Met 185 Ser Asp Tyr Glu Ser Gly Asp Asp Gly His Phe Glu Glu Val Thr Ile 205 195 200 Pro Pro Leu Asp Ser Gln Gln His Thr Glu Val <210> 1040 <211>-178 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1040 Phe Asp Leu Pro Tyr Arg Ala Glu Phe Gly Xaa Pro Gly Pro Pro Leu Ser Ala Ala Cys Ser Trp Lys Phe Arg Leu Gly Cys Leu Leu Gly Ala 25 Met Glu Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys

Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Lys Leu

Arg Tyr Ala Asn Asn Ser Asn Tyr Lys Asn Asp Val Met Ile Arg Lys

55

35

1021

75 80 65 70 Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg Ile Ile Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro Pro 105 Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp Glu His 115 Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val Asn Gln 135 Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val Gln Asp 155 150 Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys Ile Lys 170 Pro Ile <210> 1041 <211> 121 <212> PRT <213> Homo sapiens <400> 1041 Leu Val Pro Asn Ser Ala Arg Ala Gly Ala Ser Tyr Ala Ala Ala Ala Val Thr Met Ala His Tyr Lys Ala Ala Asp Ser Lys Arg Glu Gln Phe 25 Arg Arg Tyr Leu Glu Lys Ser Gly Val Leu Asp Thr Leu Thr Lys Val 35 Leu Val Ala Leu Tyr Glu Glu Pro Glu Lys Pro Asn Ser Ala Leu Asp Phe Leu Lys His His Leu Gly Ala Ala Thr Pro Glu Asn Pro Glu Ile 70 75 Glu Leu Leu Arg Leu Glu Leu Ala Glu Met Lys Glu Lys Tyr Glu Ala 85 Ile Val Glu Glu Asn Lys Lys Leu Lys Ala Lys Leu Ala Gln Tyr Glu 110 105 100

Pro Pro Gln Glu Glu Lys Arg Ala Glu

<210> 1042 <211> 253 <212> PRT <213> Homo sapiens <400> 1042 Val Asp Pro Arg Val Arg Pro Arg Ser Val Asn Gly Glu Leu Gln Lys Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn Pro Arg Leu Ala Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys Leu Gln Lys Pro 40 Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu Ile Asn Pro Asp Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His Arg Leu Leu Gly 65 His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala Cys Lys Leu Asp Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val Gln Pro Arg Ala 105 100 Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg Lys Arg Glu Glu 115 120 Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys Ala Arg Glu Glu His Glu Arg Ala Gln Arg Glu Glu Ala Arg Arg Gln Ser Gly Ala 150 Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly Met Pro Gly Asn 170 165 Phe Pro Gly Gly Met Pro Gly Met Gly Gly Met Pro Gly Met Ala 185

Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro Glu Val Leu Ala 195 200 205

Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln Asp Val Ala Gln 210 215 220

Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro Lys Val Met Asn 225 230 235 240

Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gln Ala 245 250

<210> 1043

<211> 343

<212> PRT

<213> Homo sapiens

<400> 1043

Met Lys Thr Cys Gln Glu Glu Lys Leu Met Gly His Leu Gly Val Val 1 5 10 15

Leu Tyr Glu Tyr Leu Gly Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile 20 25 30

Leu Gly Ala Leu Lys Ala Ile Val Asn Val Ile Gly Met His Lys Met 35 40 45

Thr Pro Pro Ile Lys Asp Leu Leu Pro Arg Leu Thr Pro Ile Leu Lys
50 55 60

Asn Arg His Glu Lys Val Gln Glu Asn Cys Ile Asp Leu Val Gly Arg
65 70 75 80

Ile Ala Asp Arg Gly Ala Glu Tyr Val Ser Ala Arg Glu Trp Met Arg 85 90 95

Ile Cys Phe Glu Leu Leu Glu Leu Leu Lys Ala His Lys Lys Ala Ile 100 105 110

Arg Arg Ala Thr Val Asn Thr Phe Gly Tyr Ile Ala Lys Ala Ile Gly
115 120 125

Pro His Asp Val Leu Ala Thr Leu Leu Asn Asn Leu Lys Val Gln Glu 130 135 140

Arg Gln Asn Arg Val Cys Thr Thr Val Ala Ile Ala Ile Val Ala Glu 145 150 155 160

Thr Cys Ser Pro Phe Thr Val Leu Pro Ala Leu Met Asn Glu Tyr Arg 165 170 175

Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu Lys Ser Leu Ser Phe

1024

185 190 180 Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp Tyr Ile Tyr Ala Val 200 Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg Asp Leu Val His Arg 215 Gln Thr Ala Ser Ala Val Val Gln His Met Ser Leu Gly Val Tyr Gly 235 225 230 Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu Asn Tyr Val Trp Pro 250 245 Asn Val Phe Glu Thr Ser Pro His Val Ile Gln Ala Val Met Gly Ala 265 Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys Arg Met Leu Gln Tyr 280 275 Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys Val Arg Asp Val Tyr 295 Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser Gln Asp Ala Leu Ile 315 Ala His Tyr Pro Arg Ile Tyr Asn Asp Asp Lys Asn Thr Tyr Ile Arg 325 330 335 Tyr Glu Leu Asp Tyr Ile Leu 340 <210> 1044 <211> 268 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1044 Leu Arg Arg Pro Tyr Ala Arg Tyr Asn Gly Leu Tyr Arg Ser Gly Ile

Arg Gly Arg Xaa Asn Leu Glu Ser Thr Arg Val Arg Glu Leu Pro Gly

25

Gly Ala Met Ser Cys Ile Asn Leu Pro Thr Val Leu Pro Gly Ser Pro 35 40 45

Ser Lys Thr Arg Gly Gln Ile Gln Val Ile Leu Gly Pro Met Phe Ser 50 55 60

Gly Lys Ser Thr Glu Leu Met Arg Arg Val Arg Arg Phe Gln Ile Ala 65 70 75 80

Gln Tyr Lys Cys Leu Val Ile Lys Tyr Ala Lys Asp Thr Arg Tyr Ser 85 90 95

Ser Ser Phe Cys Thr His Asp Arg Asn Thr Met Glu Ala Leu Pro Ala 100 105 110

Cys Leu Leu Arg Asp Val Ala Gln Glu Ala Leu Gly Val Ala Val Ile 115 120 125

Gly Ile Asp Glu Gly Gln Phe Phe Pro Asp Ile Val Glu Phe Cys Glu 130 135 140

Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu Asp Gly 145 150 155 160

Thr Phe Gln Arg Lys Pro Phe Gly Ala Ile Leu Asn Leu Val Pro Leu 165 170 175

Ala Glu Ser Val Val Lys Leu Thr Ala Val Cys Met Glu Cys Phe Arg 180 185 - 190

Glu Ala Ala Tyr Thr Lys Arg Leu Gly Thr Glu Lys Glu Val Glu Val
195 200 205

Ile Gly Gly Ala Asp Lys Tyr His Ser Val Cys Arg Leu Cys Tyr Phe 210 215 220

Lys Lys Ala Ser Gly Gln Pro Ala Gly Pro Asp Asn Lys Glu Asn Cys 225 230 235 240

Pro Val Pro Gly Lys Pro Gly Glu Ala Val Ala Ala Arg Lys Leu Phe 245 250 255

Ala Pro Gln Gln Ile Leu Gln Cys Ser Pro Ala Asn 260 265

<210> 1045

<211> 139

<212> PRT

<213> Homo sapiens

1026

<220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1045 Pro Gly Gln Ser Arg Trp Gln Gly Pro Pro Leu Pro Leu Cys Gln Ala Gly Ser Ala Lys Ser Gly Glu Pro Gly Ala Gly Gly Lys Ala Gly Asp 25 20 Ser Pro Ala Leu Pro Pro Pro Pro Leu Gly Ala Gln Gln Leu Leu Arg 40 Lys Val Trp His Pro Trp Arg Gly Gly Ala Pro Gly Trp Ala Gly Ser Arg Trp Pro Gly Ala Trp Arg Cys Ala Ala Gly Ala Cys Met Ala Pro 70 65 Arg Gly Thr Gln Ala Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn 90 85 Ile Thr Gly Ala Arg Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln 105 Val Gln Gly Glu Pro Pro Glu Val His Trp Leu Arg Asp Gly Gln Xaa 115 Leu Glu Leu Ala Asp Ser Thr Gln Thr Gln Val 135 130 <210> 1046 <211> 416 <212> PRT <213> Homo sapiens <400> 1046 Ser Pro Ser Glu Arg Leu Gln Arg Gly Arg Glu Glu Gln Pro Ala Gly Gly Gly Glu Ser Val Ser Ser Trp Glu Glu Gln Asn Arg Gly Gly

Ala Pro Ala Gly Ala Gly Gly Gly Pro Thr Met Ala Ile Arg Lys Lys
35 40 45

Ser	Thr 50	Lys	Ser	Pro	Pro	Val 55	Leu	Ser	His	Glu	Phe 60	Val	Leu	Gln	Asn
His 65	Ala	Asp	Ile	Val	Ser 70	Cys	Val	Ala	Met	Val 75	Phe	Leu	Leu	Gly	Leu 80
Met	Phe	Glu	Ile	Thr 85	Ala	Lys	Ala	Ser	Ile 90	Ile	Phe	Val	Thr	Leu 95	Gln
Tyr	Asn	Val	Thr 100	Leu	Pro	Ala	Thr	Glu 105	Glu	Gln	Ala	Thr	Glu 110	Ser	Val
Ser	Leu	туr 115	Tyr	Tyr	Gly	Ile	Lys 120	Asp	Leu	Ala	Thr	Val 125	Phe	Phe	Tyr
Met	Leu 130	Val	Ala	Ile	Ile	Ile 135	His	Ala	Val	Ile	Gln 140	Glu	Tyr	Met	Leu
Asp 145	Lys	Ile	Asn	Arg	Arg 150	Met	His	Phe	Ser	Lys 155	Thr	Lys	His	Ser	Lys 160
Phe	Asn	Glu	Ser	Gly 165	Gln	Leu	Ser	Ala	Phe 170	Tyr	Leu	Phe	Ala	Cys 175	Val
Trp	Gly	Thr	Phe 180	Ile	Leu	Ile	Ser	Glu 185	Asn	туr	Ile	Ser	Asp 190	Pro	Thr
Ile	Leu	Trp 195	Arg	Ala	Tyr	Pro	His 200	Asn	Leu	Met	Thr	Phe 205	Gln	Met	Lys
Phe	Phe 210	Tyr	Ile	Ser	Gln	Leu 215	Ala	Tyr	Trp	Leu	His 220	Ala	Phe	Pro	Glu
Leu 225	Tyr	Phe	Gln	Lys	Thr 230	Lys	Lys	Glu	Asp	Ile 235	Pro	Arg	Gln	Leu	Val 240
Tyr	Ile	Gly	Leu	Tyr 245	Leu	Phe	His	Ile	Ala 250	Gly	Ala	Tyr	Leu	Leu 255	Asn
Leu	Asn	His	Leu 260	Gly	Leu	Val	Leu	Leu 265	Val	Leu	His	Tyr	Phe 270	Val	Glu
Phe	Leu	Phe 275	His	Ile	Ser	Arg	Leu 280	Phe	Tyr	Phe	Ser	Asn 285	Glu	Lys	Tyr
Gln	Lys 290	Gly	Phe	Ser	Leu	Trp 295	Ala	Val	Leu	Phe	Val 300	Leu	Gly	Arg	Leu
Leu 305	Thr	Leu	Ile	Leu	Ser 310	Val	Leu	Thr	Val	Gly 315	Phe	Gly	Leu	Ala	Arg 320

Ala Glu Asn Gln Lys Leu Asp Phe Ser Thr Gly Asn Phe Asn Val Leu 325 330 335

Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe 340 345 350

Met Met Trp Lys Phe Ile Asn Phe Gln Leu Arg Arg Trp Arg Glu His 355 360 365

Ser Ala Phe Gln Ala Pro Ala Val Lys Lys Lys Pro Thr Val Thr Lys 370 375 380

Gly Arg Ser Ser Lys Lys Gly Thr Glu Asn Gly Val Asn Gly Thr Leu 385 390 395 400

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser 405 410 415

<210> 1047

<211> 466

<212> PRT

<213> Homo sapiens

<400> 1047

Pro Ala Ser Ser Gly Leu Leu Pro Leu Ser Arg Ser Asn Leu Tyr Ser 1 10 15

Gly Arg Thr Gly Ile Pro Arg Ala Pro Pro Ala Leu Ala Leu Ala 20 25 30

Thr Ala Pro Gly Arg Arg Ala Pro Val His Thr Gly Ser Leu Leu Gly 35 40 45

Thr Asn Ser Ser Thr Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe 50 55 60

Leu Met His Val Cys Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp
65 70 75 80

Asn Ser Val Phe Asp Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly 85 90 95

Ser Gly Arg Leu Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe 100 105 110

Arg Ile Glu Asp Ala Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe

		115					120					125			
Gln	Asp 130	Leu	Val	Asp	Ala	Val 135	Arg	Ala	Glu	Lys	Gly 140	Phe	Leu	Leu	Leu
Ala 145	Ser	Leu	Arg	Gln	Met 150	Lys	Lys	Thr	Arg	Gly 155	Thr	Leu	Leu	Ala	Leu 160
Glu	Arg	Lys	Asp	His 165	Ser	Gly	Gln	Val	Phe 170	Ser	Val	Val	Ser	Asn 175	Gly
Lys	Ala	Gly	Thr 180	Leu	Asp	Leu	Ser	Leu 185	Thr	Val	Gln	Gly	Lys 190	Gln	His
Val	Val	Ser 195	Val	Glu	Glu	Ala	Leu 200	Leu	Ala	Thr	Gly	Gln 205	Trp	Lys	Ser
Ile	Thr 210	Leu	Phe	Val	Gln	Glu 215	Asp	Arg	Ala	Gln	Leu 220	Tyr	Ile	Asp	Cys
Glu 225	Lys	Met	Glu	Asn	Ala 230	Glu	Leu	Asp	Val	Pro 235	Ile	Gln	Ser	Val	Phe 240
Thr	Arg	Asp	Leu	Ala 245	Ser	Ile	Ala	Arg	Leu 250	Arg	Ile	Ala	Lys	Gly 255	Gly
Val	Asn	Asp	Asn 260	Phe	Gln	Gly	Val	Leu 265	Gln	Asn	Val	Arg	Phe 270	Val	Phe
Gly	Thr	Thr 275	Pro	Glu	Asp	Ile	Leu 280	Arg	Asn	Lys	Gly	Cys 285	Ser	Ser	Ser
Thr	Ser 290	Val	Leu	Leu	Thr	Leu 295	Asp	Asn	Asn	Val	Val 300	Asn	Gly	Ser	Ser
Pro 305	Ala	Ile	Arg	Thr	Asn 310	Tyr	Ile	Gly	His	Lys 315	Thr	Lys	Asp	Leu	Gln 320
Ala	Ile	Суз	Gly	11e 325	Ser	Cys	Asp	Glu	Leu 330	Ser	Ser	Met	Val	Leu 335	Glu
Leu	Arg	Gly	Leu 340	Arg	Thr	lle	Val	Thr 345	Thr	Leu	Gln	Asp	Ser 350	Ile	Arg
Lys	Val	Thr 355	Glu	Glu	Asn	Lys	Glu 360	Leu	Ala	Asn	Glu	Leu 365	Arg	Arg	Pro
Pro	Leu 370	Cys	Tyr	His	Asn	Gly 375	Val	Gln	Tyr	Arg	Asn 380	Asn	Glu	Glu	Trp
Thr	Val	Asp	Ser	Cys	Thr	Glu	Cys	His	Cys	Gln	Asn	Ser	Val	Thr	Ile

1030

385 390 395 400 Cys Lys Lys Val Ser Cys Pro Ile Met Pro Cys Ser Asn Ala Thr Val 405 410 Pro Asp Gly Glu Cys Cys Pro Arg Cys Trp Pro Ser Asp Ser Ala Asp 425 Asp Gly Trp Ser Pro Trp Ser Glu Trp Thr Ser Cys Ser Thr Ser Cys 440 435 Gly Asn Gly Ile Gln Gln Arg Gly Arg Ser Cys Asp Ser Ala Gln Gln 455 Pro Met 465 <210> 1048 <211> 217 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1048 Asp Pro Arg Val Arg Gln Ser His Ile Ser Asp Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp Cys Ile Ile Ala Glu 25 Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg Ser Arg Ala Glu Ala 35 45 Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met Lys Ala Thr Val Ile 55 60 50

Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu 65 70 Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val Glu Asn Ala Lys Cys 90 Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln Ser Glu Gln Gln Gly 105 Glu Ala Ala Leu Ser Asp Ala Arg Cys Xaa Leu Ala Glu Leu Glu Gly 115 120 Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr 150 155 Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg Leu Cys Glu Gly Ile 170 165 Gly Ala Val Asn Val Cys Val Ser Ser Xaa Arg Gly Gly Val Val Cys 185 180 Gly Asp Leu Cys Val Ser Gly Xaa Arg Pro Val Thr Ala Val Ser Ala Ala Leu Arg Ala Thr Gly Thr Trp Arg 210 215

<210> 1049

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1049

Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile 1 5 10 15

Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser 20 25 30

Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn 35

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val 50 55 60

Pro 65	Pro	Ala	Ala	Thr	Phe 70	Gly	Ala	Asp	Asp	Leu 75	Val	Leu	Thr	Leu	Ser 80
Asn	Pro	Gln	Met	Ser 85	Leu	Glu	Gly	Thr	Glu 90	Lys	Ala	Ser	Trp	Leu 95	Gly
Glu	Gln	Pro	Gln 100	Phe	Trp	Ser	Lys	Thr 105	Gln	Val	Leu	Asp	Trp 110	Ile	Ser
Tyr	Gln	Val 115	Glu	Lys	Asn		Tyr 120	Asp	Ala	Ser	Ala	Ile 125	Asp	Phe	Ser
Arg	Cys 130	Asp	Met	Asp	Gly	Ala 135	Thr	Leu	Cys	Asn	Cys 140	Ala	Leu	Glu	Glu
Leu 145	Arg	Leu	Val	Phe	Gly 150	Pro	Leu	Gly	Asp	Gln 155	Leu	His	Ala	Gln	Leu 160
Arg	Asp	Leu	Thr	Ser 165	Ser	Ser	Ser	Asp	Glu 170	Leu	Ser	Trp	Ile	Ile 175	Glu
Leu	Leu	Glu	Lys 180	Asp	Gly	Met	Ala	Phe 185	Gln	Glu	Ala	Leu	Asp 190	Pro	Gly
Pro	Phe	Asp 195	Gln	Gly	Ser	Pro	Phe 200	Ala	Gln	Glu	Leu	Leu 205	Asp	Asp	Gly
Gln	Gln 210	Ala	Ser	Pro	Tyr	His 215	Pro	Gly	Ser	Cys	Gly 220	Ala	Gly	Ala	Pro
Ser 225	Pro	Gly	Ser	Ser	Asp 230	Val	Ser	Thr	Ala	Gly 235	Thr	Gly	Ala	Ser	Arg 240
Ser	Ser	His	Ser	Ser 245	Asp	Ser	Gly	Gly	Ser 250	Asp	val	Asp	Leu	Asp 255	Pro
Thr	Asp	Gly	Lys 260	Leu	Phe	Pro	Ser	Asp 265	Gly	Phe	Arg	Asp	Cys 270	Lys	Lys
Gly	Asp	Pro 275	Lys	His	Gly	Lys	Arg 280	Lys	Arg	Gly	Arg	Pro 285	Arg	Lys	Leu
Ser	Lys 290	Glu	Tyr	Trp	Asp	Cys 295	Leu	Glu	Gly	Lys	Lys	Ser	Lys	His	Ala
Pro 305	Arg	Gly	Thr	His	Leu 310	Trp	Glu	Phe	Ile	Arg 315	Asp	Ile	Leu	Ile	His 320
Pro	Glu	Leu	Asn	Glu 325	Gly	Leu	Met	Lys	Trp 330	Glu	Asn	Arg	His	Glu 335	Gly

1033

Val Phe Lys Phe Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln 340 345 350

Lys Lys Lys Asn Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met 355 360 365

Arg Tyr Tyr Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg 370 375 380

Leu Val Tyr Lys Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu 385 390 395 400

Val Leu Gln Ser Arg Asn 405

<210> 1050

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1050

Arg Pro Ala Leu Asp Thr Cys Cys Pro Phe Pro Ala Arg Ile Leu Gly
1 5 10 15

Ser Phe Pro Leu Ser Gln His Leu Gly Pro Ala Phe Asp Thr Thr Pro 20 25 30

Arg Leu Pro Thr Leu Arg Ala Trp Ser Leu Pro Gln Gly Pro Leu Ser 35 40 45

Trp Ala Met Ala Xaa Lys Gly Val Leu Gly Pro Gly Gln Leu Gly Ala 50 55 60

Val Ala Ile Leu Leu Tyr Leu Gly Leu Leu Arg Ser Gly Thr Gly Ala 65 70 75 80

Glu Gly Ala Glu Ala Xaa Cys Gly Val Ala Pro Gln Ala Arg Ile Thr 85 90 95

Gly Gly Ser Ser Ala Val Ala Gly Gln Trp Pro Trp Gln Val Ser Ile 105 Thr Tyr Glu Gly Val His Val Cys Gly Gly Ser Leu Val Ser Glu Gln 120 115 Trp Val Leu Ser Ala Ala His Cys Phe Pro Ser Glu His His Lys Glu 130 135 Ala Tyr Glu Val Lys Leu Gly Ala His Gln Leu Asp Ser Tyr Ser Glu 155 Asp Ala Lys Val Ser Thr Leu Lys Asp Ile Ile Pro His Pro Ser Tyr 170 165 Leu Gln Glu Gly Ser Gln Gly Asp Ile Ala Leu Leu Gln Leu Ser Arg 180 185 Pro Ile Thr Phe Ser Arg Tyr Ile Arg Pro Ile Cys Leu Pro Ala Ala 200 Asn Ala Ser Phe Pro Asn Gly Leu His Cys Thr Val Thr Gly Trp Gly 215 His Val Ala Pro Ser Val Ser Leu Leu Thr Pro Lys Pro Leu Gln Gln 225 230 235 Leu Glu Val Pro Leu Ile Ser Arg Glu Thr Trp

<210> 1051 <211> 171 <212> PRT

<213> Homo sapiens

245

<400> 1051

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg
1 10 15

Val Asp Ile Arg Arg Ser Ser Arg Arg Pro Arg Glu Pro Pro Gly
20 25 30

Pro Ser Arg Arg Arg Arg Arg Arg Pro Asp Pro Arg Thr Met Pro
35 40 45

Ser Glu Lys Thr Phe Lys Gln Arg Arg Thr Phe Glu Gln Arg Val Glu 50 55 60

Asp Val Arg Leu Ile Arg Glu Gln His Pro Thr Lys Ile Pro Val Ile

1035

75 80 65 70 Ile Glu Arg Tyr Lys Gly Glu Lys Gln Leu Pro Val Leu Asp Lys Thr 90 85 Lys Phe Leu Val Pro Asp His Val Asn Met Ser Glu Leu Ile Lys Ile 105 Ile Arg Arg Leu Gln Leu Asn Ala Asn Gln Ala Phe Phe Leu Leu 120 115 Val Asn Gly His Ser Met Val Ser Val Ser Thr Pro Ile Ser Glu Val 135 Tyr Glu Ser Glu Lys Asp Glu Asp Gly Phe Leu Tyr Met Val Tyr Ala 155 Ser Gln Glu Thr Phe Gly Met Lys Leu Ser Val 170 165 <210> 1052 <211> 189 <212> PRT <213> Homo sapiens <400> 1052 Gly Gly Pro Thr Cys Ser Ala Arg Cys Glu Pro Val Arg Pro Pro Pro 15 5 Ala Pro Glu Gln Pro Ala Ser Leu His Arg Leu Leu Ser Val Leu Ser 25 20 Pro Arg Ala Ala Ile Ala Val Met Leu Gly Ala Ala Leu Arg Arg Cys 40 Ala Val Ala Ala Thr Thr Arg Ala Asp Pro Arg Gly Leu Leu His Ser 60 50 55 Ala Arg Thr Pro Gly Pro Ala Val Ala Ile Gln Ser Val Arg Cys Tyr 65 70 Ser His Gly Ser Gln Glu Thr Asp Glu Glu Phe Asp Ala Arg Trp Val 90 Thr Tyr Phe Asn Lys Pro Asp Ile Asp Ala Trp Glu Leu Arg Lys Gly 110 100 .105 Ile Asn Thr Leu Val Thr Tyr Asp Met Val Pro Glu Pro Lys Ile Ile . 125 115 120

Asp Ala Ala Leu Arg Ala Cys Arg Arg Leu Asn Asp Phe Ala Ser Thr

130 140 Val Arg Ile Leu Glu Val Val Lys Asp Lys Ala Gly Pro His Lys Glu 155 150 Ile Tyr Pro Tyr Val Ile Gln Glu Leu Arg Pro Thr Leu Asn Glu Leu 170 Gly Ile Ser Thr Pro Glu Glu Leu Gly Leu Asp Lys Val 185 <210> 1053 <211> 315 <212> PRT <213> Homo sapiens <400> 1053 Arg His Ser Ala Ser Pro Arg Cys Arg Leu Pro Pro Thr Glu Pro Val Ser Gly Leu Arg Ala Ser Gly Glu Met Leu Leu Pro Leu Leu Leu 25 Leu Pro Met Cys Trp Ala Val Glu Val Lys Arg Pro Arg Gly Val Ser 40 Leu Thr Asn His His Phe Tyr Asp Glu Ser Lys Pro Phe Thr Cys Leu 55. Asp Gly Ser Ala Thr Ile Pro Phe Asp Gln Val Asn Asp Asp Tyr Cys 70 65 Asp Cys Lys Asp Gly Ser Asp Glu Pro Gly Thr Ala Ala Cys Pro Asn Gly Ser Phe His Cys Thr Asn Thr Gly Tyr Lys Pro Leu Tyr Ile Pro 105 110 Ser Asn Arg Val Asn Asp Gly Val Cys Asp Cys Cys Asp Gly Thr Asp 115 120 Glu Tyr Asn Ser Gly Val Ile Cys Glu Asn Thr Cys Lys Glu Lys Gly Arg Lys Glu Arg Glu Ser Leu Gln Gln Met Ala Glu Val Thr Arg Glu

155

Gly Phe Arg Leu Lys Lys Ile Leu Ile Glu Asp Trp Lys Lys Ala Arg 165 170 175

Glu Glu Lys Gln Lys Lys Leu Ile Glu Leu Gln Ala Gly Lys Lys Ser 180 185 190

Leu Glu Asp Gln Val Glu Met Leu Arg Thr Val Lys Glu Glu Ala Glu
195 200 205

Lys Pro Glu Arg Glu Ala Lys Glu Gln His Gln Lys Leu Trp Glu Glu 210 215 220

Gin Leu Ala Ala Ala Lys Ala Gin Gin Glu Gin Glu Leu Ala Ala Asp 225 230 235 240

Ala Phe Lys Glu Leu Asp Asp Met Asp Gly Thr Val Ser Val Thr 245 250 255

Glu Leu Gln Thr His Pro Glu Leu Asp Thr Asp Gly Asp Gly Ala Leu 260 265 270

Ser Glu Ala Glu Ala Gln Ala Leu Leu Ser Gly Asp Thr Gln Thr Asp 275 280 285

Ala Thr Ser Phe Tyr Asp Arg Val Trp Gly Pro Gly Gly Ala Gly Pro 290 295 300

His Ser Gln Ala Pro Thr Ala Phe Lys Asp Gly 305 310 315

<210> 1054

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1054

Val Trp Lys Val Ile Val Trp Ser His Ser Ser Leu Ile Thr Leu Leu 1 5 10 15

Gly Ile Leu Glu Glu Lys Gly Ser Lys Thr Tyr Thr His Thr Pro Thr
20 25 30

Gln Ser Asn Ser Val Phe Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly 35 40 45

Leu Asn Lys Ala Gly Lys Phe Pro Ser Leu Leu Thr His Asn Glu Asn 50 55 60

Met Val Ala Lys Val Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met

1038

80 70 75 65 Lys Lys Val Leu Cys Leu Ala Val Ala Val Gly His Val Lys Met Thr 85 Asp Asp Glu Leu Val Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val 105 Ser Leu Leu Lys Lys Asn Trp Gln Asn Val Arg Ala Leu Tyr Ile Lys 115 Ser Thr Met Gly Lys Pro Gln Arg Leu Tyr 130 135 <210> 1055 <211> 243 <212> PRT <213> Homo sapiens <400> 1055 Gly Thr Arg Glu Glu Ala Gly Val Asp Leu Val Ser Pro Thr Pro Leu Thr Pro Pro Asp Pro Gly Ala Ala Ser Ala Thr Ala Thr Ala Pro Ala 25 Pro Ala Ala Arg Arg Gly Glu Ala Met Ala Lys Val Ser Val Leu 40 45 35 Asn Val Ala Val Leu Glu Asn Pro Ser Pro Phe His Ser Pro Phe Arg 55 Phe Glu Ile Ser Phe Glu Cys Ser Glu Ala Leu Ala Asp Asp Leu Glu Trp Lys Ile Ile Tyr Val Gly Ser Ala Glu Ser Glu Glu Phe Asp Gln 85 Ile Leu Asp Ser Val Leu Val Gly Pro Val Pro Ala Gly Arg His Met 100 105 Phe Val Phe Gln Ala Asp Ala Pro Asn Pro Ser Leu Ile Pro Glu Thr 120 Asp Ala Val Gly Val Thr Val Val Leu Ile Thr Cys Thr Tyr His Gly 130 135 Gln Glu Phe Ile Arg Val Gly Tyr Tyr Val Asn Asn Glu Tyr Leu Asn 145 150 155

1039

Pro Glu Leu Arg Glu Asn Pro Pro Met Lys Pro Asp Phe Ser Gln Leu 170 165 Gln Arg Asn Ile Leu Ala Ser Asn Pro Arg Val Thr Arg Phe His Ile 180 185 Asn Trp Asp Asn Asn Met Asp Arg Leu Glu Ala Ile Glu Thr Gln Asp 200 Pro Ser Leu Gly Cys Gly Leu Pro Leu Asn Cys Thr Pro Ile Lys Gly 215 Leu Gly Leu Pro Gly Cys Ile Pro Gly Leu Leu Pro Glu Asn Ser Met 230 235 Asp Cys Ile . <210> 1056 <211> 211 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1056 His Glu Pro Arg Arg Leu Leu Xaa Asp Ala Glu Gly Pro Glu Glu Thr 5 Val Arg Leu Trp Pro Ala Ala Arg Ala Ala Met Asp Ala Ala Glu Val 20 Glu Phe Leu Ala Glu Lys Glu Leu Val Thr Ile Ile Pro Asn Phe Ser · Leu Asp Lys Ile Tyr Leu Ile Gly Gly Asp Leu Gly Pro Phe Asn Pro 55 Gly Leu Pro Val Glu Val Pro Leu Trp Leu Ala Ile Asn Leu Lys Gln

Arg Gln Lys Cys Arg Leu Leu Pro Pro Glu Trp Met Asp Val Glu Lys

Leu Glu Lys Met Arg Asp His Glu Arg Lys Glu Glu Thr Phe Thr Pro

90

1040

100 105 110 Met Pro Ser Pro Tyr Tyr Met Glu Leu Thr Lys Leu Leu Leu Asn His 120 115 Ala Ser Asp Asn Ile Pro Lys Ala Asp Glu Ile Arg Thr Leu Val Lys 135 Asp Met Trp Asp Thr Arg Ile Ala Lys Leu Arg Val Ser Ala Asp Ser 155 145 150 Phe Val Arg Gln Gln Glu Ala His Ala Lys Leu Asp Asn Leu Thr Leu 170 165 Met Glu Ile Asn Thr Ser Gly Thr Phe Leu Thr Gln Ala Leu Asn His 185 Met Tyr Lys Leu Arg Thr Asn Leu Gln Pro Leu Glu Ser Thr Gln Ser 200 Gln Asp Phe 210 <210> 1057 <211> 407 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (343) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1057 Val Ile Leu Gly Ala Gly Leu Arg Asp Lys Asp Met Trp Ile Pro Val 10 Val Gly Leu Pro Arg Arg Leu Arg Leu Ser Ala Leu Ala Gly Ala Gly 25 Arg Phe Cys Ile Leu Gly Ser Glu Ala Ala Thr Arg Lys His Leu Pro 35 Ala Arg Asn His Cys Gly Leu Ser Asp Ser Ser Pro Gln Leu Trp Pro Glu Pro Asp Phe Arg Asn Pro Pro Arg Lys Ala Ser Lys Ala Ser Leu 70 75

Asp	Phe	Lys	Arg	Tyr 85	Val	Thr	Asp	Arg	Arg 90	Leu	Ala	Glu	Thr	Leu 95	Ala
Gln	Ile	туr	Leu 100	Gly	Lys	Pro	Ser	Arg 105	Pro	Pro	His	Leu	Leu 110	Leu	Glu
Cys	Asn	Pro 115	Gly	Pro	Gly	Ile	Leu 120	Thr	Gln	Ala	Leu	Leu 125	Glu	Ala	Gly
Ala	Lys 130	Val	Val	Ala	Leu	Glu 135	Ser	Asp	Lys	Thr	Phe 140	Ile	Pro	His	Leu
Glu 145	Ser	Leu	Gly	Lys	Asn 150	Leu	Asp	Ġly	Lys	Leu 155	Arg	Val	Ile	His	Cys
Asp	Phe	Phe	Lys	Leu 165	Asp	Pro	Arg	Ser	Gly 170	Gly	Val	Ile	Lys	Pro 175	
Ala	Met	Ser	Ser 180	Arg	Gly	Leu	Phe	Lys 185	Asn	Leu	Gly	Ile	Glu 190	Ala	Val
Pro	Trp	Thr 195	Ala	Asp	Ile	Pro	Leu 200	Lys	Val	Val	Gly	Met 205	Phe	Pro	Ser
Arg	Gly 210	Glu	Lys	Arg	Ala	Leu 215	Trp	Lys	Leu	Ala	Tyr 220	Asp	Leu	Tyr	Ser
Cys 225	Thr	Ser	Ile	туг	Lys 230		Gly	Arg	Ile	Glu 235		Asn	Met		11e 240
Gly	Glu	Lys	Glu	Phe 245	Gln	Lys	Leu	Met	Ala 250	Asp	Pro	Gly	Asn	Pro 255	Asp
Leu	Tyr	His	Val 260	Leu	Ser	Val	Ile	Trp 265	Gln	Leu	Ala	Cys	Glu 270	Ile	Lys
Val	Leu	His 275	Met	Glu	Pro	Trp	Ser 280	Ser	Phe	Asp	Ile	Tyr 285	Thr	Arg	Lys
Gly	Pro 290	Leu	Glu	Asn	Pro	Lys 295	Arg	Arg	Glu	Leu	Leu 300	Asp	Gln	Leu	Gln
Gln 305	Lys	Leu	Tyr	Leu	Ile 310	Gln	Met	Ile	Pro	Arg 315	Gln	Asn	Leu	Phe	Thr 320
ГÀЗ	Asn	Leu	Thr	Pro 325	Met	Asn	Tyr	Asn	Ile 330	Phe	Phe	His	Leu	Leu 335	Lys
His	Cys	Phe	Gly	Arg	Arg	Xaa	Ala	Thr	Val	Ile	Asp	His	Leu 350	Arg	Ser

1042

Leu Thr Pro Leu Asp Ala Arg Asp Ile Leu Met Gln Ile Gly Lys Gln 355 360 365

Glu Asp Glu Lys Val Val Asn Met His Pro Gln Asp Phe Lys Thr Leu 370 375 380

Phe Glu Thr Ile Glu Arg Ser Lys Asp Cys Ala Tyr Lys Trp Leu Tyr 385 390 395 400

Asp Glu Thr Leu Glu Asp Arg 405

<210> 1058

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1058

Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly
1 5 10 15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu 20 25 30

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg 35 40 45

Trp Gly Val Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val 65 70 75 80

Val Phe Pro Phe Tyr Asp Gly Phe 85

<210> 1059

<211> 457

<212> PRT

<213> Homo sapiens

<400> 1059

Gly Thr Arg Pro Ser Ser Cys Ser Gln Thr Glu Ala Gln Pro Pro Ser 1 5 10 15

Pro Val Ser Ile Thr Ser Ala Ala Ser Met Ser Asp Lys Leu Pro Tyr 20 25 30

гÀг	val	35	wsp	116	GLY	Deu	40	uta	119	Gly	ALG	45	ALG	200	
Ile	Ala 50	Glu	Asn	Glu	Met	Pro 55	Gly	Leu	Met	Arg	Met 60	Arg	Glu	Arg	ТУ
Ser 65	Ala	Ser	Lys	Pro	Leu 70	Lys	Gly	Ala	Arg	Ile 75	Ala	Gly	Cys	Leu	His 80
Met	Thr	Val	Glu	Thr 85	Ala	Val	Leu	Ile	Glu 90	Thr	Leu	Val	Thr	Leu 95	Gl
Ala	Glu	Val	Gln 100	Trp	Ser	Ser	Cys	Asn 105	Ile	Phe	Ser	Thr	Gln 110	Asp	His
Ala	Ala	Ala 115	Ala	Ile	Ala	Lys	Ala 120	Gly	Ile	Pro	Val	Tyr 125	Ala	Trp	Lys
Gly	Glu 130	Thr	Asp	Glu	Glu	Туг 135	Leu	Trp	Cys	Ile	Glu 140	Gln	Thr	Leu	Туі
Phe 145	Lys	Asp	Gly	Pro	Leu 150	Asn	Met	Ile	Leu	Asp 155	Asp	Gly	Gly	Asp	Le:
Thr	Asn	Leu	Ile	His 165	Thr	Lys	Tyr	Pro	Gln 170	Leu	Leu	Pro	Gly	Ile 175	Arq
Gly	Ile	Ser	Glu 180	Glu	Thr	Thr	Thr	Gly 185	Val	His	Asn	Leu	туr 190	Lys	Met
Met	Ala	Asn 195	Gly	Ile	Leu	Lys	Val 200	Pro	Ala	Ile	`Asn	Val 205	Asn	Asp	Sei
Val	Thr 210	Lys	Ser	Lys	Phe	Asp 215	Asn	Leu	Tyr	Gly	Cys 220	Arg	Glu	Ser	Leu
Ile 225	Asp	Gly.	Ile	Lys	Arg 230	Ala	Thr	Asp	Val	Met 235	Ile	Ala	Gly	Lys	Va]
Ala	Val	Val	Ala	Gly 245	Tyr	Gly	Asp	Val	Gly 250	Lys	Gly	Суз	Ala	Gln 255	Ala
Leu	Arg	Gly	Phe 260	Gly	Ala	Arg	Val	11e 265	Ile	Thr	Glu	Ile	Asp 270	Pro	Ile
Asn	Ala	Leu 275	Gln	Ala	Ala	Met	Glu 280	Gly	Tyr	Glu	Val	Thr 285	Thr	Met	Asp
Glu	Ala 290	-	Gln	Glu		Asn 295		Phe	Val	Thr	Thr 300	Thr	Gly	Cys	Ile

1044

Asp Ile Ile Leu Gly Arg His Phe Glu Gln Met Lys Asp Asp Ala Ile 315 310 305 Val Cys Asn Ile Gly His Phe Asp Val Glu Ile Asp Val Lys Trp Leu 330 Asn Glu Asn Ala Val Glu Lys Val Asn Ile Lys Pro Gln Val Asp Arg 345 Tyr Arg Leu Lys Asn Gly Arg Arg Ile Ile Leu Leu Ala Glu Gly Arg 360 Leu Val Asn Leu Gly Cys Ala Met Gly His Pro Ser Phe Val Met Ser 375 380 Asn Ser Phe Thr Asn Gln Val Met Ala Gln Ile Glu Leu Trp Thr His 395 Pro Asp Lys Tyr Pro Val Gly Val His Phe Leu Pro Lys Lys Leu Asp 405 Glu Ala Val Ala Glu Ala His Leu Gly Lys Leu Asn Val Lys Leu Thr 420 425 Lys Leu Thr Glu Lys Gln Ala Gln Tyr Leu Gly Met Ser Cys Asp Gly Pro Phe Lys Pro Asp His Tyr Arg Tyr

<210> 1060 <211> 511 <212> PRT <213> Homo sapiens

<400> 1060

Glu Gly Val Met Ala Asp Gly Gln Val Ala Glu Leu Leu Arg Arg
1 5 10 15

Leu Glu Ala Ser Asp Gly Gly Leu Asp Ser Ala Glu Leu Ala Ala Glu 20 25 30

Leu Gly Met Glu His Gln Ala Val Val Gly Ala Val Lys Ser Leu Gln 35 40 45

Ala Leu Gly Glu Val Ile Glu Ala Glu Leu Arg Ser Thr Lys His Trp 50 55 60

Glu 65	Leu	Thr	Ala	Glu	Gly 70	Glu	Glu	Ile	Ala	Arg 75	Glu	Gly	Ser	His	Glu 80
Ala	Arg	Val	Phe	Arg 85	Ser	Ile	Pro	Pro	Glu 90	Gly	Leu	Ala	Gln	Ser 95	Glu
Leu	Met	Arg	Leu 100	Pro	Ser	Gly	Lys	Val 105	Gly	Phe	Ser	Lys	Ala 110	Met	Ser
Asn	Lys	Trp 115	Ile	Arg	Val	Asp	Lys 120	Ser	Ala	Ala	Asp	Gly 125	Pro	Arg	Val
Phe	Arg 130	Val	Val	Asp	Ser	Met 135	Glu	Asp	Glu	Val	Gln 140	Arg	Arg	Leu	Gln
Leu 145	Val	Arg	Gly	Gly	Gln 150	Ala	Glu	Lys	Leu	Gly 155	Glu	Lys	Glu	Arg	Ser 160
Glu	Leu	Arg	Lys	Arg 165	Lys	Leu	Leu	Ala	Glu 170	Val	Thr	Leu	Lys	Thr 175	Tyr
Trp	Val	Ser	Lys 180	Gly	Ser	Ala	Phe	Ser 185	Thr	Ser	Ile	Ser	Lys 190	Gln	Glu
Thr	Glu	Leu 195	Ser	Pro	Glu	Met	Ile 200	Ser	Ser	Gly	Ser	Trp 205	Arg	Asp	Arg
Pro	Phe 210	Lys	Pro	туг	Asn	Phe 215	Leu	Ala	His	Gly	Val 220	Leu	Pro	Asp	Ser
Gly 225	His	Leu	His	Pro	Leu 230	Leu	Lys	Val	Arg	Ser 235	Gln	Phe	Arg	Gln	Ile 240
Phe	Leu	Glu	Met	Gly 245	Phe	Thr	Glu	Met	Pro 250	Thr	Asp	Asn	Phe	Ile 255	Glu
Ser	Ser	Phe	Trp 260	Asn	Phe	Asp	Ala	Leu 265	Phe	Gln	Pro	Gln	Gln 270	His	Pro
Ala	Arg	Asp 275	Gln	His	Asp	Thr	Phe 280	Phe	Leu	Arg	Asp	Pro 285	Ala	Glu	Ala
Leu	Gln 290	Leu	Pro	Met	Asp	туг 295	Val	Gln	Arg	Val	Lys 300	Arg	Thr	His	Ser
Gln 305	Gly	Gly	Tyr	Gly	Ser 310	Gln	Gly	Tyr	Lys	Tyr 315	Asn	Trp	Lys	Leu	Asp 320
Glu	Ala	Arg	Lys	Asn 325	Leu	Leu	Arg	Thr	His 330	Thr	Thr	Ser	Ala	Ser 335	Ala

1046

Arg Ala Leu Tyr Arg Leu Ala Gln Lys Lys Pro Phe Thr Pro Val Lys 345 Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Thr Leu Asp Ala Thr 360 His Leu Ala Glu Phe His Gln Ile Glu Gly Val Val Ala Asp His Gly 370 375 Leu Thr Leu Gly His Leu Met Gly Val Leu Arg Glu Phe Phe Thr Lys 390 395 385 Leu Gly Ile Thr Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro Tyr Thr 410 405 Glu Pro Ser Met Glu Val Phe Ser Tyr His Gln Gly Leu Lys Lys Trp 425 420 Val Glu Val Gly Asn Ser Gly Val Phe Arg Pro Glu Met Leu Leu Pro 440 Met Gly Leu Pro Glu Asn Val Ser Val Ile Ala Trp Gly Leu Ser Leu 455 Glu Arg Pro Thr Met Ile Lys Tyr Gly Ile Asn Asn Ile Arg Glu Leu 470 475 465 Val Gly His Lys Val Asn Leu Gln Met Val Tyr Asp Ser Pro Leu Cys 485 490

<210> 1061 <211> 228 <212> PRT <213> Homo sapiens

<400> 1061

Arg Ala Ala Ser Thr Pro Arg Ala Ala Pro Gly Ala Ala Leu Leu Ser 1 5 10 15

Arg Leu Asp Ala Glu Pro Arg Pro Pro Pro Thr Gln Glu Ala Ala

505

Pro Pro Gly Leu Arg Ala Ala Pro Ala Ala Leu Val Met Gly Glu Gly
20 25 30

Thr Cys Glu Lys Arg Arg Asp Ala Glu Tyr Gly Ala Ser Pro Glu Gln 35 40 . 45

Val Ala Asp Asn Gly Asp Asp His Ser Glu Gly Gly Leu Val Glu Asn

1047

55 60 50 His Val Asp Ser Thr Met Asn Met Leu Gly Gly Gly Ser Ala Gly 70 Arg Lys Pro Leu Lys Ser Gly Met Lys Glu Leu Ala Val Phe Arg Glu 90 Lys Val Thr Glu Gln His Arg Gln Met Gly Lys Gly Gly Lys His His 100 Leu Gly Leu Glu Glu Pro Lys Lys Leu Arg Pro Pro Pro Ala Arg Thr 120 Pro Cys Gln Gln Glu Leu Asp Gln Val Leu Glu Arg Ile Ser Thr Met 140 135 Arg Leu Pro Asp Glu Arg Gly Pro Leu Glu His Leu Tyr Ser Leu His 145 150 Ile Pro Asn Cys Asp Lys His Gly Leu Tyr Asn Leu Lys Gln Cys Lys 170 165 Met Ser Leu Asn Gly Gln Arg Gly Glu Cys Trp Cys Val Asn Pro Asn 185 Thr Gly Lys Leu Ile Gln Gly Ala Pro Thr Ile Arg Gly Asp Pro Glu 195 200 Cys His Leu Phe Tyr Asn Glu Gln Glu Ala Arg Gly Val His Thr 215 Gln Arg Met Gln 225 <210> 1062 <211> 324 <212> PRT <213> Homo sapiens <400> 1062 Pro Arg Val Met Ala Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala Ser Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met 25 20

Lys Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr 35 40 45

WO 00/55350

Arg	50	THE	Ala	GIN	Arg	55	GLU	116	Arg	THE	60	TYL	гåз	261	1111
Ile 65	Gly	Arg	Asp	Leu	Ile 70	Asp	Asp	Leu	Lys	Ser 75	Glu	Leu	Ser	Gly	Asr 80
Phe	Glu	Gln	Val	Ile 85	Val	Gly	Met	Met	Thr 90	Pro	Thr	Val	Leu	Tyr 95	Asp
Val	Gln	Glu	Leu 100	Arg	Arg	Ala	Met	Lys 105	Gly	Ala	Gly	Thr	Asp 110	Glu	Gly
Суз	Leu	Ile 115	Glu	Ile	Leu	Ala	Ser 120	Arg	Thr	Pro	Glu	Glu 125	Ile	Arg	Arg
Ile	Ser 130	Gln	Thr	Tyr	Gln	Gln 135	Gln	Tyr	Gly	Arg	Ser 140	Leu	Glu	Asp	Asp
11e 145	Arg	Ser	Asp	Thr	Ser 150	Phe	Met	Phe	Gln	Arg 155	Val	Leu	Val	Ser	160
				165	Asp				170					175	
		_	180		Asp			185					190		
		195			Phe		200					205			
	210				Phe	215	•	٠			220				
225					Lys 230					235					240
				245	Lys				250					255	
	_		260		Ser			265					270		
		275			Val		280					285			
	290				Arg	295					300				
Lys 305	Gly	Asp	Thr	Ser	Gly 310	Asp	Tyr	Arg	Lys	Val 315	Leu	Leu	Val	Leu	Cys 320

Gly Gly Asp Asp

WO 00/55350

<210> 1063 <211> 355 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1063 Xaa Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Lys Ile Leu Gly Ser Gly Ile Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys 20 Glu Thr Glu Val Xaa Val Thr Ser Val Lys Asp Ala Lys Ile Ala Val 40 35 Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr Val Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu Glu 75 70 Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala Asn 85 Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr Ala 105 Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp Leu 120 115

1050

Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu Thr 135 Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu Ser 155 Glu Val Gly Asp Thr Gln Val Val Phe Lys His Glu Lys Glu Asp 165 Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu Met 185 180 Asp Asp Ile Glu Arg Ala Val Asp Asp Gly Val Asn Thr Phe Lys Val 200 Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu Ile 210 Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly Leu 230 Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile Pro 250 245 Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile Ser 260 265. 270 Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu Asp 275 Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly Ile 295 Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr Asn 315 305 310 Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys Pro 330 Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp Asp 345

Gln Asn Asp 355

<210> 1064

<211> 113

<212> PRT

<213> Homo sapiens

1051

<400> 1064 Ser Pro Phe Thr Leu His Cys Cys His Ser Thr Leu Tyr Asp Gly Arg Thr Gly Ser Ser Arg Glu Asn Cys Thr Val Thr Thr Val Phe Phe Thr 25 Leu Phe Gln Gly Ser Leu Ser Pro Asp Ile Glu Glu Ile Ser Phe Arg 40 Pro Glu Thr Gln Arg Pro His Ser Pro Val Ile Lys Pro Arg Phe His Ser Gly Pro Arg Ser Gly Ala Trp Pro Leu Leu Phe Gly Ser His Trp Glu Ala His Trp Pro Trp Ile Ile Ser Ser Cys Thr Pro Gly Val Leu 90 85 Pro Ala Cys Leu Leu Ser Trp Thr Ala Val Cys Lys Lys Val Thr Lys 100 105 Thr <210> 1065 <211> 634 <212> PRT <213> Homo sapiens

65 65	Asp	Cys	Pne	Tie	70	Asp	Leu	GIY	ASII	75	116	uis	GIII	11p	80
Gly	Ser	Asn	Ser	Asn 85	Arg	Tyr	Glu	Arg	Leu 90	Lys	Ala	Thr	Gln	Val 95	Ser
Lys	Gly	Ile	Arg 100	Asp	Asn	Glu	Arg	Ser 105	Gly	Arg	Ala	Arg	Val 110		Val
Ser	Glu	Glu 115	Gly	Thr	Glu	Pro	Glu 120	Ala	Met	Leu	Gln	Val 125	Leu	Gly	Pro
Lys	Pro 130	Ala	Leu	Pro	Ala	Gly 135	Thr	Glu	Asp	Thr	Ala 140	Lys	Glu	Asp	Ala
145		_			150					155			Gly		160
				165					170				Ala	175	
		_	180		_	_		185					Lys 190		
		195					200					205	Glu		
	210					215					220		Asp		
225					230					235			Thr		240
				245					250				Thr	255	
			260	_				265					Glu 270		
		275					280					285	Ala		
	290					295					300		Trp		
305					310					315			Gly		320
туr	атХ	GIĀ	Asp	325	TYT	TTE	tre	ren	330	ASN	TYT	wrd	His	335	GTÅ

Arg	Gln	Gly	Gln 340	Ile	Ile	Tyr	Asn	Trp 345	Gln	Gly	Ala	Gln	Ser 350	Thr	Gln
Asp	Glu	Val 355	Ala	Ala	Ser	Ala	11e 360	Leu	Thr	Ala	Gln	Leu 365	Asp	Glu	Glu
Leu	Gly 370	Gly	Thr	Pro	Val	Gln 375	Ser	Arg	Val	Val	Gln 380	Gly	Lys	Glu	Pro
Ala 385	His	Leu	Met	Ser	Leu 390	Phe	Gly	Gly	Lys	Pro 395	Met	Ile	Ile	Tyr	Lys 400
Gly	Gly	Thr	Ser	Arg 405	Glu	Gly	Gly	Gln	Thr 410	Ala	Pro	Ala	Ser	Thr 415	Arg
Leu	Phe	Gln	Val 420	Arg	Ala	Asn	Ser	Ala 425	Gly	Ala	Thr	Arg	Ala 430	Val	Glu
Val	Leu	Pro 435	Lys	Ala	Gly	Ala	Leu 440	Asn	Ser	Asn	Asp	Ala 445	Phe	Val	Leu
Lys	Thr 450	Pro	Ser	Ala	Ala	Tyr 455	Leu	Trp	Val	Gly	Thr 460	Gly	Ala	Ser	Glu
Ala 465	Glu	Lys	Thr	Gly	Ala 470	Gln	G <b>l</b> u	Leu	Leu	Arg 475	Val	Leu	Arg	Ala	Gln 480
Pro	Val	Gln	Val	Ala 485	Glu	Gly	Ser	Glu	Pro 490	Asp	Gly	Phe	Trp	Glu 495	Ala
Leu	Gly	Gly	Lys 500	Ala	Ala	Туr	Arg	Thr 505	Ser	Pro	Arg	Leu	Lys 510	Asp	Lys
Lys	Met	Asp 515	Ala	His	Pro	Pro	Arg 520	Leu	Phe	Ala	Cys	Ser 525	Asn	Lys	Ile
Gly	Arg 530	Phe	Val	Ile	Glu	Glu 535	Val	Pro	Gly	Glu	Leu 540	Met	Gln	Glu	Asp
Leu 545	Ala	Thr	Asp	Asp	Val 550	Met	Leu	Leu	Asp	Thr. 555	Trp	Asp	Gln	Val	Phe 560
Val	Trp	Val	Gly	Lys 565	Asp	Ser	Gln	Glu	Glu 570	Glu	Lys	Thr	Glu	Ala 575	Leu
Thr	Ser	Ala	Lys 580	Arg	Tyr	Ile	Gln	Thr 585	Asp	Pro	Ala	Asn	Arg 590	Asp	Arg
Arg	Thr	Pro 595	Ile	Thr	Val	Val	Lys 60 <b>0</b>	Gln	Gly	Phe	Glu	Pro 605	Pro	Ser	Phe

Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp Ser Val Asp Pro 610 615. 620

Leu Asp Arg Ala Met Ala Glu Leu Ala Ala 625 630

<210> 1066

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1066

Arg Ala Arg Gly Arg Cys Arg Arg Ser Pro Asp Gly Val Gly Ile Glu

1 5 10 15

Ala Pro Arg Lys Lys Val Lys Tyr Gln Glu Ile Gln Val Glu Glu Pro 20 25 30

Tyr Tyr Asp Cys His Glu Cys Thr Glu Thr Phe Thr Ser Ser Thr Ala 35 40 45

Phe Ser Glu His Leu Lys Thr His Ala Ser Met Ile Ile Phe Glu Pro 50 55 60

Ala Asn Ala Phe Gly Glu Cys Ser Gly Tyr Ile Glu Arg Ala Ser Thr
65 70 75 80

Ser Thr Gly Gly Ala Asn Gln Ala Asp Glu Lys Tyr Phe Lys Cys Asp

Val Cys Gly Gln Leu Phe Asn Asp Arg Leu Ser Leu Ala Arg His Gln
100 105 110

Asn Thr His Thr Gly 115

<210> 1067

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1067

Pro Glu Gln Arg Gly Ser Ser Met Ala His Gly Pro Gly Ala Leu Met
1 5 10 15

Leu Lys Cys Val Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu 20 25 30 Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Ser Thr Cys Pro Pro 35 40 45

Ser Ser Thr Thr Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser 50 55 60

Tyr Pro Met Thr Asp Val Phe Leu Ile Cys Phe Ser Val Val Asn Pro 65 70 75 80

Ala Ser Phe Gln Asn Val Lys Glu Glu Trp Val Pro Glu Leu Lys Glu 85 90 95

Tyr Ala Pro Asn Val Pro Phe Leu Leu Ile Gly Thr Gln Ile Asp Leu 100 105 110

Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Asn Asp Met Lys Glu Lys
115 120 125

Pro Ile Cys Val Glu Gln Gly Gln Lys Leu Ala Lys Glu Ile Gly Ala 130 135 140

Cys Cys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Thr 145 150 155 160

Val Phe Asp Glu Ala Ile Ile Ala Ile Leu Thr Pro Lys Lys His Thr
165 170 175

Val Lys Lys Arg Ile Gly Ser Arg Cys Ile Asn Cys Cys Leu Ile Thr 180 185 190

<210> 1068

<211> 360

<212> PRT

<213> Homo sapiens

<400> 1068

Ser Arg Trp Ala Arg Arg Asp Pro Gln Glu Arg Arg Glu Arg Gly Thr
1 5 10 15

Arg Val Gln Ser Ser Gly Thr Trp Ile Gly Ala Gly Ala Met Gly Gly 20 25 30

Glu Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala Met Ala Gln 35 40 45

Gln	His 50	Glu	Gly	Gly	Val	Gln 55	Glu	Leu	Val	Asn	Thr 60	Phe	Phe	Ser	Phe
Leu 65	Arg	Arg	Lys	Thr	Asp 70	Phe	Phe	Ile	Gly	Gly 75	Glu	Glu	Gly	Met	Ala 80
Glu	Lys	Leu	Ile	Thr 85	Gln	Thr	Phe	Ser	His 90	His	Asn	Gln	Leu	Ala 95	Gln
Lys	Thr	Arg	Arg 100	Glu	Lys	Arg	Ala	Arg 105	Gln	Glu	Ala	Glu	Arg 110	Arg	Glu
Lys	Ala	Glu 115	Arg	Ala	Ala	Arg	Leu 120	Ala	Lys	Glu	Ala	Lys 125	Ser	Glu	Thr
Ser	Gly 130	Pro	Gln	Ile	Lys	Glu 135	Leu	Thr	Asp	Glu	Glu 140	Ala	Glu	Arg	Leu
Gln 145	Leu	Glu	Ile	Asp	Gln 150	Lys	Lys	Asp	Ala	Glu 155	Asn	His	Glu	Ala	Gln 160
Leu	Lys	Asn	Gly	Ser 165	Leu	Asp	Ser	Pro	Gly 170	Lys	Gln	Asp	Thr	Glu 175	Glu
Asp	Glu	Glu	Glu 180	Asp	Glu	Lys	Asp	Lys 185	Gly	Lys	Leu	Lys	Pro 190	Asn	Leu
Gly	Asn	Gly 195		Asp	Leu	Pro	Asn 200	Tyr	Arg	Trp	Thr	Gln 205	Thr	Leu	Ser
Glu	Leu 210	Asp	Leu	Ala	Val	Pro 215	Phe	Cys	Val	Asn	Phe 220	Arg	Leu	Lys	Gly
Lys 225	Asp	Met	Val	Val	Asp 230	Ile	Gln	Arg	Arg	His 235	Leu	Arg	Val	Gly	Leu 240
Lys	Gly	Gln	Pro	Ala 245	Ile	Ile	Asp	Gly	Glu 250	Leu	Tyr	Asn	Glu	Val 255	Lys
Val	Glu	Glu	Ser 260	Ser	Trp	Leu	Ile	Glu 265	Asp	Gly	Lys	Val	Val 270	Thr	Val
His	Leu	Glu 275	Lys	Ile	Asn.	Lys	Met 2 <b>80</b>	Glu	Trp	Trp	Ser	Arg 285	Leu	Val	Ser
Ser	Asp 290	Pro	Glu	Ile	Asn	Thr 295	Lys	Lys	Ile	Asn	Pro 300	Glu	Asn	Ser	Lys
Leu	Ser	Asp	Leu		Ser	Glu	Thr	Arg		Met		Glu	Lys		Met

Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser Asp Glu Gln 325 330 335

Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His Pro Glu Met 340 345 350

Asp Phe Ser Lys Ala Lys Phe Asn 355 360

<210> 1069

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1069

Val Trp Leu Ser Trp Asp Gln Glu Lys Ile Pro Val Leu Asp Gln Glu
1 5 10 15

Ala Ala Asp Gly Ser Ser Thr Leu Gly Gly Gly Ala Gly Thr Met Gly 20 25 30

Leu Ser Ala Arg Tyr Gly Pro Gln Phe Thr Leu Gln His Val Pro Asp 35 40 45

Tyr Arg Gln Xaa Val Tyr Ile Pro Gly Ser Asn Ala Thr Leu Thr Asn 50 55 60

Ala Ala Gly Lys Arg Gly Trp Gln Gly Pro Ser Arg Trp Gln Trp Gln 65 70 75 80

Gln Glu Glu Val Gly Gln Glu Gly Glu Glu Val Thr Trp Arg Pro Gly
85 90 95

Gln Glu Pro Gln Gly Gly Leu Ser Pro Thr Ser Pro Ala Ser Pro Tyr
100 105 110

Leu His Pro Gly Leu Arg Val Ser Gly Leu Thr Pro Arg Ile Leu Val 115 120 125

Gly Ala Lys Ala Met Leu Pro Leu Gly Asn Arg Asn Lys Cys Pro Val 130 135 140

Ser Thr Tyr Pro Phe Pro Pro Arg Gly Leu Asn Met Gln Lys Gln Phe 145 150 155 160

PCT/US00/05882

Arg Trp Glu Pro Pro Ser Asn Gln Leu Leu Tyr Pro Trp Gly
165 170

<210> 1070

<211> 445

<212> PRT

<213> Homo sapiens

<400> 1070

Pro Arg Gly Leu Thr Gly Leu Trp Arg Ser Ser Leu Pro Ile Arg Lys
1 5 10 15

Leu Gln Leu Pro Pro Asp Ala Leu Lys Met Ala Thr Ser Leu Gly Ser 20 25 30

Asn Thr Tyr Asn Arg Gln Asn Trp Glu Asp Ala Asp Phe Pro Ile Leu 35 40 45

Cys Gln Thr Cys Leu Gly Glu Asn Pro Tyr Ile Arg Met Thr Lys Glu 50 55 60

Lys Tyr Gly Lys Glu Cys Lys Ile Cys Ala Arg Pro Phe Thr Val Phe 65 70 75 80

Arg Trp Cys Pro Gly Val Arg Met Arg Phe Lys Lys Thr Glu Val Cys
85 90 95

Gln Thr Cys Ser Lys Leu Lys Asn Val Cys Gln Thr Cys Leu Leu Asp 100 105 110

Leu Glu Tyr Gly Leu Pro Ile Gln Val Arg Asp Ala Gly Leu Ser Phe 115 120 125

Lys Asp Asp Met Pro Lys Ser Asp Val Asn Lys Glu Tyr Tyr Thr Gln 130 135 140

Asn Met Glu Arg Glu Ile Ser Asn Ser Asp Gly Thr Arg Pro Val Gly 145 150 155 . 160

Met Leu Gly Lys Ala Thr Ser Thr Ser Asp Met Leu Leu Lys Leu Ala 165 170 175

Arg Thr Thr Pro Tyr Tyr Lys Arg Asn Arg Pro His Ile Cys Ser Phe 180 185 190

Trp Val Lys Gly Glu Cys Lys Arg Gly Glu Glu Cys Pro Tyr Arg His 195 200 205

Glu	Lys 210	Pro	Thr	Asp	Pro	Asp 215	Asp	Pro	Leu	Ala	Asp 220	Gln	Asn	Ile	Lys
Asp 225	Arg	Tyr	Tyr	Gly	Ile 230	Asn	Asp	Pro	Val	Ala 235	Asp	Lys	Leu	Leu	Lys 240
Arg	Ala	Ser	Thr	Met 245	Pro	Arg	Leu	Asp	Pro 250	Pro	Glu	Asp	Lys	Thr 255	Ile
Thr	Thr	Leu	Tyr 260	Val	Gly	Gly	Leu	Gly 265	Asp	Thr	Ile	Thr	Glu 270	Thr	Asp
Leu	Arg	Asn 275	His	Phe	Tyr	Gln	Phe 280	Gly	Glu	Ile	Arg	Thr 285	Ile	Thr	Val
Val	Gln 290	Arg	Gln	Gln	Cys	Ala 295	Phe	Ile	Gln	Phe	Ala 300	Thr	Arg	Gln	Ala
Ala 305	Glu	Val	Ala	Ala	Glu 310	Lys	Ser	Phe	Asn	Lys 315	Leu	Ile	Val	Asn	Gly 320
Arg	Arg	Leu	Asn	Val 325	Lys	Trp	Gly	Arg	Ser 330	Gln	Ala	Ala	Arg	Gly 335	Lys
Glu	Lys	Glu	Lys 340	Asp	Gly	Thr	Thr	Asp 345	Ser	Gly	Ile	Lys	Leu 350	Glu	Pro
Val	Pro	Gly 355		Pro	Gly	Ala	Leu 360	Pro	Pro	Pro	Pro	Ala 365	Ala	Glu	Glu
Glu	Ala 370	Ser	Ala	Asn	Tyr	Phe 375	Asn	Leu	Pro	Pro	Sér 380	Gly	Pro	Pro	Ala
Val 385	Val	Asn	Ile	Ala	Leu 390	Pro	Pro	Pro	Pro	Gly 395	Ile	Ala	Pro	Pro	Pro 400
Pro	Pro	Gly	Phe	Gly 405	Pro	His	Met	Phe	His 410	Pro	Met	Gly	Pro	Pro 415	Pro
Pro	Phe	Met	Arg 420	Ala	Pro	Gly	Pro	Ile 425		Tyr	Pro	Ser	Gln 430	Asp	Pro
Gln	Arg	Met 435	Gly	Ala	His	Ala	Gly 440	Lys	His	Ser	Ser	Pro 445			

<sup>&</sup>lt;210> 1071

<sup>&</sup>lt;211> 346

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<220> <221> SITE <222> (286) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (287) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (291) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (294) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1071 Trp Ser Arg Leu Cys Leu Leu Lys Gln Tyr Leu Phe Thr Met Lys Leu Gln Ser Pro Glu Phe Gln Ser Leu Phe Thr Glu Gly Leu Lys Ser Leu 25 Thr Glu Leu Phe Val Lys Glu Asn His Glu Leu Arg Ile Ala Gly Gly 35 40 Ala Val Arg Asp Leu Leu Asn Gly Val Lys Pro Gln Asp Ile Asp Phe Ala Thr Thr Ala Thr Pro Thr Gln Met Lys Glu Met Phe Gln Ser Ala 70 Gly Ile Arg Met Ile Asn Asn Arg Gly Glu Lys His Gly Thr Ile Thr 85 90 Ala Arg Leu His Glu Glu Asn Phe Glu Ile Thr Thr Leu Arg Ile Asp 100 105 Val Thr Thr Asp Gly Arg His Ala Glu Val Glu Phe Thr Thr Asp Trp 120 Gln Lys Asp Ala Glu Arg Arg Asp Leu Thr Ile Asn Ser Met Phe Leu 130 140 135 Gly Phe Asp Gly Thr Leu Phe Asp Tyr Phe Asn Gly Tyr Glu Asp Leu 145 150 155 160

1061

Lys Asn Lys Lys Val Arg Phe Val Gly His Ala Lys Gln Arg Ile Gln 165 170 175

Glu Asp Tyr Leu Arg Ile Leu Arg Tyr Phe Arg Phe Tyr Gly Arg Ile 180 185 190

Val Asp Lys Pro Gly Asp His Asp Pro Glu Thr Leu Glu Ala Ile Ala 195 200 205

Glu Asn Ala Lys Gly Leu Ala Gly Ile Ser Gly Glu Arg Ile Trp Val 210 215 220

Glu Leu Lys Lys Ile Leu Val Gly Asn His Val Asn His Leu Ile His 225 230 235 240

Leu Ile Tyr Asp Leu Asp Val Ala Pro Tyr Ile Gly Leu Pro Ala Asn 245 250 255

Ala Ser Leu Glu Glu Phe Asp Lys Val Ser Lys Asn Val Asp Gly Phe 260 265 270

Ser Pro Lys Pro Val Thr Leu Leu Ala Ser Leu Phe Lys Xaa Xaa Asp 275 280 285

Asp Val Xaa Lys Leu Xaa Leu Arg Leu Lys Ile Ala Lys Glu Glu Lys 290 295 300

Asn Leu Gly Leu Phe Ile Val Lys Asn Arg Lys Asp Leu Ile Lys Ala 305 310 315 320

Thr Asp Ser Ser Asp Pro Leu Lys Pro Tyr Gln Asp Phe Ile Ile Asp 325 330 335

Ser Arg Glu Pro Asp Ala His Ser Cys Met 340 345

<210> 1072

<211> 404

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

	2> ( 3> X		qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1 Asp		Leu	Asn 5	Leu	Asp	Leu	Thr	Pro 10	Arg	Met	Leu	Arg	Arg 15	Leu
Leu	Glu	Arg	Pro 20	Cys	Thr	Leu	Ala	Leu 25	Leu	Val	Gly	Ser	Gln 30	Leu	Ala
Val	Met	Met 35	Tyr	Leu	Ser	Leu	Gly 40	Gly	Phe	Arg	Ser	Leu 45	Ser	Ala	Leu
Phe	Gly 50	Arg	Asp	Gln	Gly	Pro 55	Thr	Phe	Asp	Туr	Ser 60	His	Pro	Arg	Asp
Val 65	Tyr	Ser	Asn	Leu	Ser 70	His	Leu	Pro	Gly	Ala 75	Pro	Xaa	Gly	Pro	Pro 80
Xaa	Pro	Gln	Gly	Leu 85	Pro	Tyr	Cys	Pro	Glu 90	Arg	Ser	Pro	Leu	Leu 95	Val
Gly	Pro	Val	Ser 100	Val	Ser	Phe	Ser	Pro 105	Val	Pro	Ser	Leu	Ala 110	Glu	Ile
Val	Glu	Arg 115	Asn	Pro	Arg	Val	<b>Gl</b> u 120	Pro	Gly	Gly	Arg	Туг 125	Arg	Pro	Ala
Gly	Cys 130	Glu	Pro	Arg	Ser	Arg 135	Thr	Ala	Ile	Ile	Val 140	Pro	His	Arg	Ala
Arg 145		His	His	Leu	Arg 150	Leu	Leu	Leu	туг	His 155	Leu	His	Pro	Phe	Leu 160
Gln	Arg	Gln	Gln	Leu 165	Ala	Tyr	Gly	Ile	Tyr 170	Val	Ile	His	Gln	Ala 175	Gly
Asn	Gly	Thr	Phe 180	Asn	Arg	Ala	Lys	Leu 185	Leu	Asn	Val	Gly	Val 190	Arg	Glu
Ala	Leu	Arg 195	Asp	Glu	Glu	Trp	Asp 200	Cys	Leu	Phe	Leu	His 205	Asp	Val	Asp
Leu	Leu 210	Pro	Glu	Asn	Asp	His 215	Asn	Leu	Tyr	Val	Cys 220	Asp	Pro	Arg	Gly
Pro 225	Arg	His	Val	Ala	Val 230	Ala	Met	Asn	Lys	Phe 235	Gly	Tyr	Ser	Leu	Pro 240
Tyr	Pro	Gln	Tyr	Phe 245	Gly	Gly	Val	Ser	Ala 250	Leu	Thr	Pro	Asp	Gln 255	туг

Leu Lys Met Asn Gly Phe Pro Asn Glu Tyr Trp Gly Trp Gly Glu 270 265 260 Asp Asp Asp Ile Ala Thr Arg Val Arg Leu Ala Gly Met Lys Ile Ser 280 275 Arg Pro Pro Thr Ser Val Gly His Tyr Lys Met Val Lys His Arg Gly 295 Asp Lys Gly Asn Glu Glu Asn Pro His Arg Phe Asp Leu Leu Val Arg 305 310 315 320 Thr Gln Asn Ser Trp Thr Gln Asp Gly Met Asn Ser Leu Thr Tyr Gln 325 330 Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Asn Ile Thr Ala Asp

Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Ash lle Thr Ala Asp
340 345 350

Ile Gly Thr Asp Pro Arg Gly Pro Arg Ala Pro Ser Gly Pro Arg Tyr 355 360 365

Pro Pro Gly Ser Ser Gln Ala Phe Arg Gln Glu Met Leu Gln Arg Arg 370 375 380

Pro Pro Ala Arg Pro Gly Pro Leu Ser Thr Ala Asn His Thr Ala Leu 385 390 395 400

Arg Gly Ser His

<210> 1073

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1073

Asn Lys Glu Gln Leu Met Asp Lys Ser Gly Ile Asp Ser Leu Asp His 1 5 10 15

Val Thr Ser Asp Ala Val Glu Leu Ala Asn Arg Ser Asp Asn Ser Ser 20 25 30

Asp Ser Ser Leu Phe Lys Thr Gln Cys Ile Pro Tyr Ser Pro Lys Gly

1064

35 40 45 Glu Lys Arg Asn Pro Ile Arg Lys Phe Val Arg Thr Pro Glu Ser Val 55 His Ala Ser Xaa Ser Ser Ser Asp Ser Ser Phe Glu Pro Ile Pro Leu 75 70 Thr Ile Lys Ala Ile Phe Glu Arg Phe Lys Asn Arg Lys Lys Arg Tyr 85 Lys Lys Lys Lys Arg Arg Tyr Gln Pro Thr Gly Arg Pro Arg Gly 105 100 Arg Pro Glu Gly Arg Arg Asn Pro Ile Tyr Ser Leu Ile Asp Lys Lys 120 Lys Gln Phe Arg Ser Arg Gly Ser Gly Phe Pro Phe Leu Glu Ser Glu 130 Asn Glu Lys Asn Ala Pro Trp Arg Lys Ile Leu Thr Phe Glu Gln Ala 150 155 Val Ala Arg Gly Phe Phe Asn Tyr Ile Glu Lys Leu Lys Tyr Glu His 165 170 His Leu Lys Glu Ser Leu Lys Gln Met Asn Val Gly Glu Asp Leu Glu 180 Asn Glu Asp Phe Asp Ser Arg Arg Tyr Lys Phe Leu Asp Asp Asp Gly 195 200 Ser Ile Ser Pro Ile Glu Glu Ser Thr 215 210 <210> 1074 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (122)

1065

<220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (125) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (147) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1074 Thr His Tyr Arg Ala Lys Leu Val Arg Leu Pro Gly Thr Gly Ser Gly Asn Ser Arg Val Asp Pro Arg Val Arg Glu Gln Pro Ser Pro Ala Ser 25 Ser Ala Pro Gly Gln Leu Asn Ser Cys Gln Asp Val Leu Pro Ala Glu 35 Pro Ala Ala Val Pro Thr Pro Thr Gln Val Ser Leu Thr Gln Val Ser 55 Pro Lys Glu Pro Ser Thr Val Ser Ala Ser Ser Phe Leu Trp Leu Cys 75 70 Pro Lys Leu Trp Gly Leu Trp Pro Ser Ser Glu Gly Gly Cys Phe Leu 85 Asn His His Arg Arg His His Arg Cys Arg Arg Gln Arg Xaa Asn Ser 100 105 Cys Asp Arg Ala Val Val Ser Lys Ala Xaa Xaa Leu Xaa Ala Ala Xaa 120 Phe Trp Gly Leu Leu Leu Ile Gln Ile Leu Met Leu Arg Gln Ala Ile 130 135 140 Phe Gly Xaa Asn Lys Asn Ser Gln Glu Ala Lys Asn Ser Pro Ile Trp 160 145 150 155

Lys

<210> 1075

WO 00/55350

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1075

Ser Ser Ser Trp His Ala Arg Tyr Thr Val Leu Thr Tyr Leu Gln Thr 1 5 10 15

Met Val Phe Tyr Asn Leu Phe Ile Phe Leu Asn Asn Glu Asp Ala Val 20 25 30

Lys Asp Ile Arg Trp Leu Val Ile Ser Leu Leu Glu Asp Glu Gln Leu 35 40 45

Glu Val Arg Glu Met Ala Ala Thr Thr Leu Ser Gly Leu Leu Gln Cys
50 55 60

Asn Phe Leu Thr Met Asp Ser Pro Met Gln Ile His Phe Glu Gln Leu 65 70 75 80

Cys Lys Thr Lys Leu Pro Lys Lys Arg Lys Arg Asp Pro Gly Ser Val 85 90 95

Gly Asp Thr Ile Pro Ser Ala Glu Leu Val Lys Arg His Ala Gly Val

Leu Gly Leu Gly Ala Cys Val Leu Ser Ser Pro Tyr Asp Val Pro Thr 115 120 125

Trp Met Pro Gln Leu Leu Met Asn Leu Ser Ala His Leu Asn Asp Pro 130 135 140

Gln Pro Ile Glu Met Thr Val Lys Lys Thr Leu Ser Asn Phe Arg Arg 145 150 155 160

Leu Thr Met Thr Thr Gly Arg Asn Ile Asn Ser Asn Ser Leu Met Thr 165 170 175

Asn Cys Leu Phe Ser Pro Ile Phe Leu Cys His His Ala Ile Met His 180 185 190

Arg Lys Met Thr Ser Pro His Phe Arg Leu Phe Ser Ser Lys Ile Pro 195 200 205

His Pro Gln Val Pro Ser Val Val Ala Leu Cys Lys Phe 210 215 220

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<210> 1076
<211> 166
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (166) -
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1076----
Ala Arg Gly Ala Arg Val Arg Ala Cys Ala Ser Leu Gly Ser Trp Arg
Gly Pro Arg Gly Glu Gly Trp Lys Met Ser Met Asp Val Thr Phe Leu
                                 25
Gly Thr Gly Ala Ala Tyr Pro Ser Pro Thr Arg Gly Ala Ser Ala Val
                             40
         35
Val Leu Arg Cys Glu Gly Glu Xaa Trp Leu Phe Asp Cys Gly Glu Gly
                         55
Thr Gln Thr Gln Leu Met Lys Ser Gln Leu Lys Ala Gly Arg Ile Thr
                     70
Lys Ile Phe Ile Thr His Leu His Gly Asp His Phe Phe Gly Leu Pro
                 85
Gly Leu Leu Cys Thr Ile Ser Leu Gln Ser Gly Ser Met Val Ser Lys
```

105

100

Gln Pro Ile Glu Ile Tyr Gly Pro Val Gly Phe Gly Thr Leu Ser Gly 120 Glu Pro Trp Asn Ser Leu Xaa Arg Glu Leu Val Phe His Tyr Val Val 135 His Glu Leu Val Pro Thr Ala Asp Gln Cys Pro Ala Glu Gly Thr Lys 150 155 Arg Ile Xaa Ala Cys Xaa 165 <210> 1077 <211> 239 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids Gly Leu Arg Ala Leu Ser Gln His Thr Asp Leu Ser Pro Leu Ser Pro 5 10 10 Lys Thr Pro Ala Pro Ser Met Arg Xaa Lys Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val Phe Lys Val Val Leu Ile Gly Glu Ser Gly 40 45 Val Gly Lys Thr Asn Leu Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser 50 55 His Asp Ser Arg Thr Thr Ile Gly Val Glu Phe Ser Thr Arg Thr Val Met Leu Gly Thr Ala Ala Val Lys Ala Gln Ile Trp Asp Thr Ala Gly Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val 100 105 Gly Ala Leu Leu Val Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val 120

Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp His Ala Glu Ala Thr Ile

130 135 140 Val Val Met Leu Val Gly Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu 155 145 150 Val Pro Thr Glu Glu Ala Arg Met Phe Ala Glu Asn Asn Gly Leu Leu 170 Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Glu Leu Ala Phe 185 180 Glu Thr Val Leu Lys Glu Ile Phe Ala Lys Val Ser Lys Gln Arg Gln 195 200 Asn Ser Ile Arg Thr Asn Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly 215 Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala Cys Cys Ile Ser Leu 225 230 235 <210> 1078 <211> 171 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1078 Ile Leu Lys Gly Ser Ser Gly Ser Val Trp Leu Arg Asn Leu Gln Leu Gly Leu Phe Gly Thr Ala Leu Gly Leu Val Gly Leu Trp Trp Ala Glu 25 Gly Thr Ala Val Ala Thr Arg Gly Phe Phe Gly Tyr Thr Pro Ala 40 45 Val Trp Gly Val Val Leu Asn Gln Ala Phe Gly Gly Leu Leu Val Ala Val Val Lys Tyr Ala Asp Asn Ile Leu Lys Gly Phe Ala Thr Ser 70 Leu Ser Ile Val Leu Ser Thr Val Ala Ser Ile Arg Leu Phe Gly Phe

90

His Val Asp Pro Leu Phe Ala Leu Gly Ala Gly Leu Val Ile Gly Ala 100 105 110

Val Tyr Leu Tyr Ser Leu Pro Arg Gly Ala Xaa Lys Ala Ile Ala Ser 115 120 125

Ala Ser Ala Ser Ala Ser Gly Pro Cys Val His Gln Gln Pro Pro Gly
130 135 140

Gln Pro Pro Pro Pro Gln Leu Ser Ser His Arg Gly Asp Leu Ile Thr 145 150 155 160

Glu Pro Phe Leu Pro Lys Ser Val Leu Val Lys 165 170

<210> 1079

<211> 141

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1079

Arg Arg Val Cys His Ser Ser Pro His Leu Ser Ser Pro Arg Ala Ala 1 5 10 15

Cys Glu Gln Gln Ala Val Ala Leu Thr Leu Gln Glu Asp Arg Ala Ser 20 25 30

Leu Thr Leu Ser Gly Gly Pro Ser Ala Leu Ala Phe Asp Leu Ser Lys
35 40 45

Val Pro Gly Pro Glu Ala Ala Pro Arg Leu Xaa Ala Leu Thr Leu Gly
50 55 60

Leu Ala Lys Arg Val Trp Ser Leu Glu Arg Arg Leu Ala Ala Glu
65 70 75 80

Glu Thr Ala Val Ser Pro Arg Lys Ser Pro Arg Pro Ala Gly Pro Gln
85 90 95

Leu Phe Leu Pro Asp Pro Asp Pro Gln Arg Gly Gly Pro Gly Pro Gly 100 105 110

Val Arg Arg Cys Pro Gly Glu Ser Leu Ile Asn Pro Gly Phe Lys 115 120 125 Ser Lys Lys Pro Ala Gly Gly Val Asp Phe Asp Glu Thr 130 135 140

<210> 1080

<211> 359

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the maturally occurring L-amino acids

<400> 1080

Ala Val Glu Ser Arg Xaa Pro Gly Trp Asn His His Gly Ile Gln Phe
1 5 10 15

Pro Cys Gly Ser Val Trp Leu Glu His Ala Ile Ala Met Ile Cys Gly 20 25 30

Asn Val Cys Leu Trp Lys Gly Ala Pro Thr Thr Ser Leu Ile Ser Val 35 40 45

Ala Val Thr Lys Ile Ile Ala Lys Val Leu Glu Asp Asn Lys Leu Pro 50 55 60

Gly Ala Ile Cys Ser Leu Thr Cys Gly Gly Ala Asp Ile Gly Thr Ala 65 70 75 80

Met Ala Lys Asp Glu Arg Val Asn Leu Leu Ser Phe Thr Gly Ser Thr 85 90 95

Gln Val Gly Lys Gln Val Gly Leu Met Val Gln Glu Arg Phe Gly Arg 100 105 110

Ser Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile Ala Phe Glu Asp 115 120 125

Ala Asp Leu Ser Leu Val Val Pro Ser Ala Leu Phe Ala Ala Val Gly
130 135 140

Thr Ala Gly Gln Arg Cys Thr Thr Ala Arg Arg Leu Phe Ile His Glu 145 150 155 160

Ser Ile His Asp Glu Val Val Asn Arg Leu Lys Lys Ala Tyr Ala Gln 165 170 175

Ile Arq Val Gly Asn Pro Trp Asp Pro Asn Val Leu Tyr Gly Pro Leu

1072

180 185 190 His Thr Lys Gln Ala Val Ser Met Phe Leu Gly Ala Val Glu Glu Ala 200 Lys Lys Glu Gly Gly Thr Val Val Tyr Gly Gly Lys Val Met Asp Arg 215 Pro Gly Asn Tyr Val Glu Pro Thr Ile Val Thr Gly Leu Gly His Asp 235 230 Ala Ser Ile Ala His Thr Glu Thr Phe Ala Pro Ile Leu Tyr Val Phe 245 · 250 Lys Phe Lys Asn Glu Glu Glu Val Phe Ala Trp Asn Asn Glu Val Lys 265 . 270 Gln Gly Leu Ser Ser Ser Ile Phe Thr Lys Asp Leu Gly Arg Ile Phe . 275 280 Arg Trp Leu Gly Pro Lys Gly Ser Asp Cys Gly Ile Val Asn Val Asn 295 Ile Pro Thr Ser Gly Ala Glu Ile Gly Gly Ala Phe Gly Glu Lys 310 315 His Thr Gly Gly Gly Arg Glu Ser Gly Ser Asp Ala Trp Lys Gln Tyr 325 Met Arg Arg Ser Thr Cys Thr Ile Asn Tyr Ser Lys Asp Leu Pro Leu 345 Ala Gln Gly Ile Lys Phe Gln 355 <210> 1081 <211> 138 <212> PRT <213> Homo sapiens

Glu Leu Val Lys Cys Ile Glu Glu Leu Cys Gln Lys Arg Glu Glu Leu 35 40 45

Cys Arg Gln Ile Gln Glu Glu Glu Asp Glu Lys Gln Arg Leu Gln Asn 50 55 60

Glu Val Arg Gln Leu Thr Glu Lys Leu Ala Arg Val Asn Glu Asn Leu 65 70 75 80

Ala Arg Lys Ile Ala Ser Arg Asn Glu Phe Asp Arg Thr Ile Ala Glu 85 90 95

Thr Glu Ala Ala Tyr Leu Lys Ile Leu Glu Ser Ser Gln Thr Leu Leu
100 105 110

Ser Val Leu Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala Thr Ala Pro 115 120 125

Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser 130 135

<210> 1082

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1082

Ser Pro Ile Ser Asn Cys Glu Ile Thr Ile Thr Asp Pro Gly Lys Phe
1 5 10 15

Tyr Asn Ser Asn Ser Val Phe Ser Arg Gly Asn Met Ala Lys Val Phe 20 25 30

Ser Phe Ile Leu Val Thr Thr Ala Leu Xaa Met Gly Arg Glu Ile Ser 35 40  $\cdot$  45

Ala Leu Glu Asp Cys Ala Gln Glu Gln Met Arg Leu Arg Ala Gln Val
50 55 60

Arg Leu Leu Glu Thr Arg Val Lys Gln Gln Gln Val Lys Ile Lys Gln 65 70 75 80

Leu Leu Gln Glu Asn Glu Val Gln Phe Leu Asp Lys Gly Asp Glu Asn 85 90 95

Thr Val Val Asp Leu Gly Ser Lys Arg Gln Tyr Ala Asp Cys Ser Glu

			100					105					110		
Ile	Phe	Asn 115	Asp	Gly	туr	Lys	Leu 120	Ser	Gly	Phe	Tyr	Lys 125	Ile	Lys	Pro
Leu	Gln 130	Ser	Pro	Ala	Glu	Phe 135	Ser	Val	туr	Суз	Asp 140	Met	Ser	Asp	Gly
Gly 145	Gly	Trp	Thr	Val	Ile 150	Gln	Arg	Arg	Ser	Asp 155	Gly	Ser	Glu	Asn	Phe
Asn	Arg	Gly	Trp	Lys 165	Asp	Tyr	Glu	Asn	Gly 170	Phe	Gly	Asn	Phe	Val 175	Gln
Lys	His	Gly	Glu 180	Tyr	Trp	Leu	Gly	Asn 185	Lys	Asn	Leu	His	Phe 190	Leu	Thr
Thr	Gln	Glu 195	Asp	Tyr	Thr	Leu	Lys 200	Ile	Asp	Leu	Ala	Asp 205	Phe	Glu	Lys
Asn	Ser 210	Arg	Tyr	Ala	Gln	Туг 215	Lys	Asn	Phe	Lys	Val 220	Gly	Asp	Glu	Lys
Asn 225	Phe	Tyr	Glu	Leu	Asn 230	Ile	Gly	Glu	Tyr	Ser 235	Gly	Thr	Ala	Gly	Asp 240
Ser	Leu	Ala	Gly	Asn 245	Phe	His	Pro	Glu	Val 250	Gln	Trp	Trp	Ala	Ser 255	His
Gln	Arg	Met	Lys 260	Phe	Ser	Thr	Trp	Asp 265	Arg	Asp	His	Asp	Asn 270	Tyr	Glu
Gly	Asn	Cys 275	Ala	Glu	Glu	Asp	Gln 280	Ser	Gly	Trp	Trp	Phe 285	Asn	Arg	Cys
His	Ser 290	Ala	Asn	Leu	Asn	Gly 295	Val	Tyr	Tyr	Ser	Gly 300	Pro	Tyr	Thr	Ala
Lys 305	Thr	Asp	Asn	Gly	Ile 310	Val	Trp	Tyr	Thr	Trp 315	His	Gly	Trp	Trp	Туг 320
Ser	Leu	Lys	Ser	Val 325	Val	Met	Lys	Ile	Arg 330	Pro	Asn	Asp	Phe	Ile 335	Pro

Asn Val Ile

<210> 1083 <211> 256

	3> H		sapi	ens											
<22	1> s 2> (	56)	qual	s an	y of	the	nat	ural	ly o	ccur:	ring	L-aı	mino	acio	ds
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			Asn	Gly 5	Pro	Ala	Asp	Phe	Glu 10	Lys	Arg	Val	Glu	Gly 15	Gly
Gly	Arg	Pro	Arg 20	Ala	Pro	Leu	<b>V</b> al	Asn 25	Ala	Leu	Leu	Thr	Ala 30	Pro	Glu
Phe	Leu	Ile 35	Tyr	Thr	Gly	Cys	Met 40	Val	Суз	Val	Phe	Leu 45	Phe	Cys	Phe
Ser	Pro 50	Pro	Ala	Gly	Leu	Phe 55	Xaa	Gly	Trp	Gly	Gly 60	Gly	Phe	Ala	Met
Ser 65	Asp	Asp	Asp	Ser	Arg 70	Ala	Ser	Thr	Ser	Ser 75	Ser	Ser	Ser	Ser	Ser 80
Ser	Asn	Gln	Gln	Thr 85	Glu	Lys	Glu	Thr	Asn 90	Thr	Pro	Lys	Lys	Lys 95	Glu
Ser	_ _		Ser 100	Met 							Leu - ·				Ala
Lys	Arg	Ile 115	Gln	Lys	Glu	Leu	Ala 120	Asp	Ile	Thr	Leu	Asp 125	Pro	Pro	Pro
Asn	Cys 130	Ser	Ala	Gly	Pro	Lys 135	Gly	Asp	Asn	Ile	Tyr 140	Glu	Trp	Arg	Ser
Chr 145	Ile	Leu	Gly	Pro	Pro 150	Gly	Ser	Val	Tyr	Glu 155	Gly	Gly	Val	Phe	Phe 160
Leu	Asp	Ile	Thr	Phe 165	Thr	Pro	<b>Gl</b> u	Tyr	Pro 170	Phe	Lys	Pro	Pro	Lys 175	Val
Chr	Phe	Arg	Thr 180	Arg	Ile	Tyr	His	Cys 185	Asn	Ile	Asn	Ser	Gln 190	Gly	Val
(le	Cys	Leu 195	Asp	Ile	Leu	Lys	Asp 200	Asn	Trp	Ser	Pro	Ala 205	Leu	Thr	Ile
	Lys 210		Leu	Leu		Ile 215	_	Ser	Leu	Leu	Thr 220	Asp	Cys	Asn	Pro

Ala Asp Pro Leu Val Gly Ser Ile Ala Thr Gln Tyr Met Thr Asn Arg 225 230 235 240

Ala Glu His Asp Arg Met Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr 245 250 255

<210> 1084

<211> 176

<212> PRT

<213> Homo sapiens

<400> 1084

Glu Lys Cys Val Ser Phe Ser Ala Val Leu Lys Ser Leu Ser Pro Val
1 5 10 15

Asp Pro Val Glu Pro Ile Ser Asn Ser Glu Pro Ser Met Asn Ser Asp 20 25 30

Met Gly Lys Val Ser Lys Asn Asp Thr Glu Glu Glu Ser Asn Lys Ser 35 40 45

Ala Thr Thr Asp Asn Glu Ile Ser Arg Thr Glu Tyr Leu Cys Glu Asn 50 60

Ser Leu Glu Gly Lys Asn Lys Asp Asn Ser Ser Asn Glu Val Phe Pro 65 70 75 80

Gln Gly Ala Glu Glu Arg Met Cys Tyr Gln Cys Glu Ser Glu Asp Glu 85 90 95

Pro Gln Ala Asp Gly Ser Gly Leu Thr Thr Ala Pro Pro Thr Pro Arg
100 105 110

Asp Ser Leu Gln Pro Ser Ile Lys Gln Arg Leu Ala Arg Leu Gln Leu 115 120 125

Ser Pro Asp Phe Thr Phe Thr Ala Gly Leu Ala Ala Glu Val Ala Ala 130 135 140

Arg Ser Leu Ser Phe Thr Thr Met Gln Glu Gln Thr Phe Gly Asp Glu 145 150 155 160

Glu Glu Glu Gln Ile Ile Glu Glu Asn Lys Asn Glu Ile Glu Glu Lys 165 170 175

<210> 1085 <211> 220 <212> PRT <213> Homo sapiens <400> 1085 His Arg Lys Ser Arg Pro Ala Asn His Cys Val Tyr Phe Tyr Gly Asp 15 5 10 Glu Ile Ser Phe Ser Cys His Glu Thr Ser Arg Phe Ser Ala Ile Cys Gln Gly Asp Gly Thr Trp Ser Pro Arg Thr Pro Ser Cys Gly Asp Ile Cys Asn Phe Pro Pro Lys Ile Ala His Gly His Tyr Lys Gln Ser Ser 50 Ser Tyr Ser Phe Phe Lys Glu Glu Ile Ile Tyr Glu Cys Asp Lys Gly 70 Tyr Ile Leu Val Gly Gln Ala Lys Leu Ser Cys Ser Tyr Ser His Trp 90 Ser Ala Pro Ala Pro Gln Cys Lys Ala Leu Cys Arg Lys Pro Glu Leu Val Asn Gly Arg Leu Ser Val Asp Lys Asp Gln Tyr Val Glu Pro Glu Asn Val Thr Ile Gln Cys Asp Ser Gly Tyr Gly Val Val Gly Pro Gln 135 Ser Ile Thr Cys Ser Gly Asn Arg Thr Trp Tyr Pro Glu Val Pro Lys 145 Cys Glu Trp Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys 170

Arg Leu Met Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu 185

Glu Val Tyr Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg

205

Asp Ser Ala Arg Gln Ser Thr Leu Asp Lys Glu Leu 215 210

165

<210> 1086

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1086

Val Lys Pro Ser Gly Gly Glu Gly Asp Val Ala Gln Arg Pro Arg Asp 1 5 10 15

Arg Leu Ser Ser Arg Leu Leu Gly Ser Pro Ala Trp Arg Arg Leu 20 25 30

Met Thr Glu Gly Pro Leu Ala Gly Ala Pro Val Cys Ile Phe Glu Gly 35 40 45

Pro Gly Pro Pro Gly Gly Ala Gly Ser Tyr Ser Trp Gly Leu Gly Phe 50 55 60

Arg Arg Ala Gly Gly Ala Gly Leu Lys Ala Ala Leu Val Tyr Gly 65 70 75 80

Val Val Thr Gln Ser His Trp Gln Arg Trp Gly Leu Ala Val Ala Trp 85 90 95

Gln Tyr Leu Gly Ile Ala Ser Thr Gly Asn Lys Asp Gly His Glu Gln 100 105 110

Lys Lys Lys Lys 130

<210> 1087

<211> 289

<212> PRT

<213> Homo sapiens

<400> 1087

Ile Leu Thr Tyr Lys Met Lys Gln Asp Ala Ser Arg Asn Ala Ala Tyr

1 5 10 15

Thr Val Asp Cys Glu Asp Tyr Val His Val Val Glu Phe Asn Pro Phe 20 25 30

Glu Asn Gly Asp Ser Gly Asn Leu Ile Ala Tyr Gly Gly Asn Asn Tyr

1079

	•														
•		35					40					45			
Val	Val 50	Ile	Gly	Thr	Ċys	Thr 55	Phe	Gln	Glu	Glu	Glu 60	Ala	Asp	Val	Glu
Gly 65	Ile	Gln	туг	Lys	Thr 70	Leu	Arg	Thr	Phe	His 75	His	Gly	Val	Arg	Val 80
qzA	Gly	Ile	Ala	Trp 85	Ser	Pro	Glu	Thr	Arg 90	Leu	Asp	Ser	Leu	Pro 95	Pro
Val	Ile	Lys	Phe 100	Cys	Thr	Ser	Ala	Ala 105	Asp	Met	Lys	Ile	Arg 110	Leu	Phe
Thr	Ser	Asp 115	Leu	Gln	Asp	Ĺуз	Asn 120	Ğlu	Tyr	Lys	Val	Leu 125		Gly	His
Thr	Asp 130	Phe	Ile	Asn	Gly	Leu 135	Val	Phe	Asp	Pro	Lys 140	Glu	Gly	Gln	Glu
Ile 145	Ala	Ser	Val	Ser	Asp 150	Asp	His	Thr	Cys	Arg 155	Ile	Trp	Asn	Leu	Glu 160
Gly	Val	Gln	Thr	Ala 165	His	Phe	Val	Leu	His 170	Ser	Pro	Gly	Met	Ser 175	Val
Cys	Trp	His	Pro 180	Glu	Glu	Thr	Phe	Lys 185	Leu	Met	Val	Ala	Glu 190	Lys	Asn
Gly	Thr	11e 195	Arg	Phe	туг	Asp	Leu 2 <b>0</b> 0	Leu	Ala	Gln	Gln	Ala 205	Ile	Leu	ser
Leu	Glu 210	Ser	Glu	Gln	Val	Pro 215	Leu	Met	Ser	Ala	His 220	Trp	Cys	Leu	Lys
Asn 225	Thr	Phe	Lys	Val	Gly 230	Ala	Val	Ala	Gly	Asn 235	Asp	Trp	Leu	Ile	Trp 240
Asp	Ile	Thr	Arg	Ser 245	Ser	Tyr	Pro	Gln	Asn 250	Lys	Arg	Pro	Val	His 255	Met
Asp	Arg	Ala	Cys 260	Leu	Phe	Arg	Trp	Ser 265	Thr	Ile	Ser	Glu	Asn 270	Leu	Phe
Ala	Thr	Thr 275	Gly	Tyr	Pro	Gly	L <b>y</b> s 280	Met	Gln	Ala	Ser	Phe 285	Lys	Phe	Ile

Ile

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<21	3> H	omo	sapi	ens											
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			qual:	s an	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	acio	is
			-	'					_		_				
<400	)> 1	088													
Pro	Thr	Arg	Pro	Asn	Trp	Thr	Gly	Met	Thr	Asn	Leu	Leu	Asp	Ile	Pro
1				5					10					15	
Gly	Leu	Ser		Leu	Ser	Asp	Thr		Ile	Met	Asp	Ser	Ile	Ala	Ala
			20					25					30		
	_				<b>-</b>	•	•	<b>-</b>		D	<b>7</b>	**- 1	D==		*
Pne	Leu		Leu	Pro	Asn	Arg		Leu	vai	PIO	ren	45	Pro	ASP	Leu
		35			•		40					43			
Gln	Acn	t/a l	A1 =	Gln	T.e.u	Ara	Ser	Pro	T.eu	Pro	Ara	Glv	Ile	Tle	Ara
GIII	50	Val	MIG	GIII	неч	55	-	110			60	1			5
	30					33									
Ile	His	Leu	Leu	Ala	Ala	Ara	Glv	Leu	Ser	Ser	Lvs	Asp	Lys	Tyr	Val
65					70		•			75			-	-	80
				. 4 -						<u>.</u>					
Lys	Gly	Leu	Ile	Glu	Gly	Lys	Ser	Asp	Pro	Tyr	Ala	Leu	Val	Arg	Leu
				85					90					95	
	•										•				
Gly	Thr	Gln	Thr	Phe	Cys	Ser	Arg	Val	Ile	Asp	Glu	Glu	Leu	Asn	Pro
			100					105					110	•	
															_
Gln	Trp	_	Glu	Thr	Tyr	Glu		Met	Val	His	Glu		Pro	Gly	Gln
		115					120					125			
<b>~</b> 3		<b></b>	7	<b>~1</b>	••- 1	<b>n</b> b	3	<b>T </b>	N	D	3	T		7	Dho
GIU		GIU	vaı	GIU	vai	135	Asp	rÀa	ASD	PIO	140	гуѕ	Asp	Asp	Pne
	130					133					140				
T.eu	Gl v	Ara	Mat	T.ve	T.eu	Aen	Val	Glv	T.ve	Val	T.e.n	Gln	Ala	Ser	Val
145	GLY	nry	Met	БуЗ	150	P	val	OL,	<b>-173</b>	155	DCG	<b>U</b> 1	****	002	160
143					130					100					100
Leu	Asp	Asp	Trp	Phe	Pro	Leu	Gln	Glv	Glv	Gln	Glv	Gln	Val	His	Leu
				165				1	170		1			175	
Arg	Leu	Glu	Trp	Leu	Ser	Leu	Leu	Ser	Asp	Ala	Glu	Lys	Leu	Glu	Gln
-			180					185	-				190		
Val	Leu	Gln	Trp	Asn	Trp	Gly	Val	Ser	Ser	Arg	Pro	Asp	Pro	Pro	Ser
		195					200					205			

	Ala 210	Ile	Leu	Val	Val	Tyr 215	Leu	Asp	Arg	Ala	Gln 220	Asp	Leu	Pro	Leu
Lys 225	Lys	Gly	Asn	Lys	Glu 230	Pro	Asn	Pro	Met	Val 235	Gln	Leu	Ser	Ile	Gln 240
Asp	Val	Thr	Gln	Glu 245	Ser	Lys	Ala	Val	Туг 250	Ser	Thr	Asn	Cys	Pro 255	Val
Trp	Glu	Glu	Ala 260	Phe	Arg	Phe	Phe	Leu 265	Gln	Asp	Pro	Gln	Ser 270	Gln	Glu
Leu	Asp	Val 275	Gln	Val	Lys	Asp	Asp 280	Ser	Arg	Ala	Leu	Thr 285	Leu	Gly	Ala
Leu	Thr 290	Leu	Pro	Leu	Ala	Arg 295	Leu	Leu	Thr	Ala	Pro 300	Glu	Leu	Ile	Leu
305					310					315				Leu	320
				325					330					11e 335	
		•	340					345					350	Ser	
		355					360					365		Суз	
	370					375					380			Ile	
385					390					395				Gly	400
				405					410					Ala 415	
			420					425					430	Arg	
		435					440			•		445	٠.	Glu	
	450					455					460			Leu	
Arg 465	Cys	Lys	Val	Arg	Leu 470	Thr	Thr	Val		Asn 475	Ser	Gly	Phe	Leu	Asp 480

Glu	Trp	Leu	Thr	Leu 485	Glu	Asp	<b>V</b> al	Pro	Ser 490	Gly	Arg	Leu	His	Leu 495	Arg
Leu	Glu	Arg	Leu 500	Thr	Pro	Arg	Pro	Thr 505	Ala	Ala	Glu	Leu	Glu 510	Glu	Val
Leu	Gln	Val 515	Asn	Ser	Leu	Ile	Gln 520	Thr	Gln	Lys	Ser	Ala 525	Glu	Leu	Ala
Ala	Ala 530	Leu	Leu	Ser	Ile	Tyr 535	Met	Glu	Arg	Ala	Glu 540	Asp	Leu	Pro	Leu
Arg 545	Lys	Gly	Thr	Lys	His 550	Leu	Ser	Pro	Tyr	Ala 555	Thr	Leu	Thr	Val	Gly 560
Asp	Ser	Ser	His	Lys 565	Thr	Lys	Thr	Ile	Ser 570	Gln	Thr	Ser	Ala	Pro 575	Val
Trp	Asp	Glu	Ser 580	Ala	Ser	Phe	Leu	Ile 585	Arg	Lys	Pro	His	Thr 590	Glu	Ser
Leu	Glu	Leu 595	Gln	Val	Arg	Gly	Glu 600	Gly	Thr	Gly	Val	Leu 605	Gly	Ser	Leu
Ser	Leu 610	Pro	Leu	Ser	Glu	Leu 615	Leu	Val	Ala	Asp	Gln 620	Leu	Суз	Leu	Asp
Arg 625	Trp	Phe	Thr	Leu	Ser 630	Ser	Gly	Gln	Gly	Gln 635	Val	Leu	Leu	Arg	Ala 640
Gln	Leu	Gly	Ile	Leu 645	Val	Ser	Gln	His	Ser 650	Gly	Val	Glu	Ala	His 655	Ser
His	Ser	Туг	Ser 660	His	Ser	Ser	Ser	Ser 665	Leu	Ser	Glu	Glu	Pro 670	Glu	Leu
Ser	Gly	Gly 675	Pro	Xaa	His	Ile	Thr 680	Ser	Ser	Ala	Pro	Glu 685	Leu	Arg	Gln
Arg	Leu 690	Thr	His	Val	Asp	Ser 695	Pro	Leu	Glu	Ala	Pro 700	Ala	Gly	Pro	Leu
Gly 705	Gln	Val	Lys	Leu	Thr 710	Leu	Trp	Tyr	Tyr	Ser 715	Glu	Glu	Arg	Lys	Leu 720
Val	Ser	Ile	Val	His 725	Gly	Cys	Arg	Ser	Leu 730	Arg	Gln	Asn	Gly	Arg 735	Asp
Pro	Pro	Asp	Pro 740	Tyr	Val	Ser	Leu	Leu 745	Leu	Leu	Pro	Asp	Lys 750	Asn	Arg

1083

Gly Thr Lys Arg Arg Thr Ser Gln Lys Lys Arg Thr Leu Ser Pro Glu
755 760 765

Phe Asn Glu Arg Phe Glu Trp Glu Leu Pro Leu Asp Glu Ala Gln Arg 775 Arg Lys Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg 795 785 790 Glu Arg Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp 810 805 Leu Ser Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp 825 Lys Gly Ser Ser 835 <210> 1089 <211> 409 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (393) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (406) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1089 Arg Ser Ser Val Ala Ser Val His Thr Trp Arg Gln Arg Arg Gln Val 10 5 Xaa Val Phe Val Leu Pro Ser Thr Ala Asn Met Lys Arg Pro Lys Leu 30 25 20

Lys	Lys	Ala 35	Ser	Lys	Arg	Met	Thr 40	Cys	His	Lys	Arg	19r 45	Lys	IIe	GIn
Lys	Lys 50	Val	Arg	Glu	His	His 55	Arg	Lys	Leu	Arg	Lys 60	Glu	Ala	Lys	Lys
Xaa 65	Gly	His	Lys	Lys	Pro 70	Arg	Lys	Asp	Pro	Gly 75	Val	Pro	Asn	Ser	Ala 80
Pro	Phe	Lys	Glu	Ala 85	Leu	Leu	Arg	Glu	Ala 90	Glu	Leu	Arg	·Lys	Gln 95	Arg
			100					105					Lys 110		
		115			•		120					125	Pro		
	130					135					140		Glu		
145					150					155			Gln		160
		-	-	165		-			170			-	Leu	175	
			180					185					Ala 190		• •
		195					200					205	Ser		
	210	-				215					220		Lys		
225					230					235			Asp		240
				245					250				Pro	255	
			260					265					270		
		275					280					285	Ile		
PTO	Asn 290	Val	GLY	rys	ser	Ser 295	TTE	TTE	ASN	ser	300	гÀа	Gln	GIU	GIN

1085

Met Cys Asn Val Gly Val Ser Met Gly Leu Thr Arg Ser Met Gln Val 305 315 Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp Ser Pro Ser Phe Ile 330 325 Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala Leu Arg Ser Pro Ala 345 Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala Ser Ala Ile Leu Ser 355 Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr Thr Val Pro Gly Tyr 375 370 Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys Ser Glu Lys Arg Tyr 390 395 Ala Pro Lys Arg Trp Xaa Pro Lys Cys 405 <210> 1090 <211> 161 <212> PRT <213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<400> 1090

Pro Lys Asn Trp Xaa Thr Ala Arg Ala Asp His His Ala Ser Met Asn 1 5 10 15

Trp Val Pro Cys Gly His Ser Tyr Phe Gly Ala Thr Leu Asn Ser Phe 20 25 30

Ile His Val Leu Met Tyr Ser Tyr Tyr Gly Leu Ser Ser Val Pro Ser 35 40 45

Met Arg Pro Tyr Leu Trp Trp Xaa Glu Val His His Ser Gly Ala Ala 50 55 60

Ala Ser Val Cys Ala Asp Asn His Pro Asp Gln Leu Arg Gly His Leu 65 70 Ala Val His Ile Pro Ser Trp Leu Val Val Phe Pro Asp Trp Ile His 90 Asp Phe Pro Asp Cys Ser Leu His Lys Leu Leu His Ser Asp Leu Gln 105 Gln Glu Arg Gly Leu Pro Lys Glu Arg Pro Pro Glu Gly Pro Pro Glu 125 Trp Val His Gly Cys Cys Glu Trp Thr His Gln Gln Leu Phe Thr Pro 135 130 Gly Lys Gln Cys Glu Ala Lys Glu Ala Ala Glu Gly Leu Lys Ser Lys 150 155 Asn

<210> 1091 <211> 118 <212> PRT <213> Homo sapiens

<400> 1091

Ser Lys Asn Ser Ala Arg Glu Glu Met Ala Ala Ser Ser Ser Ser 1 5 10 15

Ser Ala Gly Gly Val Ser Gly Ser Ser Val Thr Gly Ser Gly Phe Ser 20 25 30

Val Ser Asp Leu Ala Pro Pro Arg Lys Ala Leu Phe Thr Tyr Pro Lys 35 40 45

Gly Ala Gly Glu Met Leu Glu Asp Gly Ser Glu Arg Phe Leu Cys Glu 50 . 55 60

Ser Val Phe Ser Tyr Gln Val Ala Ser Thr Leu Lys Gln Val Lys His 65 70 75 80

Asp Gln Gln Val Ala Arg Met Glu Lys Leu Ala Gly Leu Val Glu Glu 85 90 95

Leu Glu Ala Asp Glu Trp Arg Phe Lys Pro Ile Glu Gln Leu Leu Gly
100 105 110

Phe Thr Pro Ser Ser Gly 115

<210> 1092

<211> 198

<212> PRT

<213> Homo sapiens

<400> 1092

Ala Pro Phe Leu Ala Ala Gly Val Ser Met Gly Gly Met Leu Leu 1 5 10 15

Asn Tyr Leu Gly Lys Ile Gly Ser Lys Thr Pro Leu Met Ala Ala Ala 20 25 30

Thr Phe Ser Val Gly Trp Asn Thr Phe Ala Cys Ser Glu Ser Leu Glu
35 40 45

Lys Pro Leu Asn Trp Leu Leu Phe Asn Tyr Tyr Leu Thr Thr Cys Leu 50 55 60

Gln Ser Ser Val Asn Lys His Arg His Met Phe Val Lys Gln Val Asp
65 70 75 80

Phe Thr Ser Val Met Phe Gly Tyr Gln Thr Ile Asp Asp Tyr Tyr Thr 100 105 110

Asp Ala Ser Pro Ser Pro Arg Leu Lys Ser Val Gly Ile Pro Val Leu 115 120 125

Cys Leu Asn Ser Val Asp Asp Val Phe Ser Pro Ser His Ala Ile Pro 130 135 140

Tyr Gly Gly His Ile Gly Phe Leu Glu Gly Ile Trp Pro Arg Gln Ser 165 170 175

Thr Tyr Met Asp Arg Val Phe Lys Gln Phe Val Gln Ala Met Val Glu 180 185 190

His Gly His Glu Leu Ser 195

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<210> 1093
 <211> 36
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 Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser
 Arg Ser Pro Asp Val Val Ile His Pro Pro Arg Pro Pro Lys Met Leu
 Gly Leu Gln Val
          35
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<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (157) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1094 Tyr Xaa Gln Leu Val Leu Leu Gln Val Pro Val Arg Ile Pro Gly Ser 5 Thr His Ala Ser Xaa Asp Ala Trp Val Ala Arg Gln Leu Ala Lys Pro 25 Asp Asn Thr Leu Phe Val Asn Arg Thr Leu Phe Asp Gln Val Leu Glu 40 Phe Leu Cys Ser Pro Asp Asp Ser Arg His Ser Glu Arg Gln Gln 55 Val Leu Leu Glu Leu Gln Ala Gly Gly Ile Val Gln Phe Glu Glu Ser Arq Leu Ile Arq Met Ala Glu Lys Ala Glu Phe Tyr Gln Ile Cys 90 Glu Phe Met Tyr Glu Arg Glu His Gln Tyr Asp Lys Ile Ile Asp Cys 105 100 Xaa Leu Arg Asp Pro Leu Arg Glu Glu Val Phe Asn Tyr Ile His 125 120 Asn Ile Leu Xaa Ile Pro Gly His Ser Ala Glu Glu Lys Gln Ser Val 135 Trp Gln Lys Ala Met Asp His Ile Glu Glu Xaa Xaa Xaa Leu Lys Pro 145 150 Cys Lys Ala Ala Glu Leu Val Ala Thr His Phe Ser Gly His Ile Glu 165 170 Thr Val Ile Lys Lys Leu Gln Asn Gln Val Leu Leu Phe Lys Phe Leu 180 185 Arg Ser Leu Leu Asp Pro Arg Glu Gly Ile His Val Asn Gln Glu Leu 195 200 Leu Gln Ile Ser Pro Cys Ile Thr Glu Gln Phe Ile Glu Leu Leu Cys

Gln Phe Asn Pro Thr Gln Val Ile Glu Thr Leu Gln Val Leu Glu Cys

225					230					235					240
Tyr	Arg	Leu	Glu	Glu 245	Thr	Ile	Gln	Ile	Thr 250	Gln	Lys	Tyr	Gln	Leu 255	His
Glu	Val	Thr	Ala 260	Tyr	Leu	Leu	Glu	Lys 265	Lys	Gly	Asp	Ile	His 270	Gly	Ala
Phe	Leu	Ile 275	Met	Leu	Glu	Arg	Leu 280	Gln	Ser	Lys	Leu	Gln 285	Glu	Val	Thr
His	Gln 290	Gly	Glu	Asn	Thr	Lys 295	Glu	Asp	Pro	Ser	Leu 300	Lys	Asp	Val	Glu
Asp 305	Thr	Met	Val	Glu	Thr 310	īle	Ala	Leu	Cys	Gln 315	Arg	Asn	Ser	His	Asn 320
Leu	Asn	Gln	Gln	Gln 325	Arg	Glu	Ala	Leu	Trp 330	Phe	Pro	Leu	Leu	Glu 335	Ala
Met	Met	Ala	Pro 340	Gln	Lys	Leu	Ser	Ser 345	Ser	Ala	Ile	Pro	His 350	Leu	His
		355					360					365	Ser		
Ala	Phe 370	Ile	Ala	Leu	Pro	Ser 375	Ile	Leu	Gln	Arg	Ile 380	Leu	Gln	Asp	Pro
Val 385	Tyr	Gly	Lys	Gly	Lys 390	Leu	Gly	Glu	Ile	Gln 395	Gly	Leu	Ile	Leu	Gly 400
Met	Leu	Asp	Thr	Phe 405	Asn	Tyr	Glu	Gln	Thr 410	Leu	Leu	Glu	Thr	Thr 415	Thr
ser	Leu	Leu	Asn 420	Gln	Asp	Leu	His	Trp 425	Ser	Leu	Cys	Asn	Leu 430	Arg	Ala
Ser		Thr 435	Arg	Gly	Leu	Asn	Pro 440	ГÀЗ	Gln	Asp	Tyr	Cys 445	Ser	Ile	Cys
Leu	Gln 450	Gln	Tyr	Lys	Arg	Arg 455	Gln	Glu	Met	Ala	Asp 460	Glu	Ile	Ile	Val
465			_		470					475			Asn		480
				485					490				Tyr	495	
Ser	Ser	Ser	Asn	Lvs	Val	Gly	Lys	Leu	Ser	Glu	Asn	Ser	Ser	Glu	Ile

1091

510 500 505 Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro Ser Tyr 520 His Gln Ser Lys Gly Asp Pro Thr Ala Lys Lys Gly Thr Ser Glu Pro 535 Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys Arg Leu 545 555 Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser Gln Asn 570 Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser Ala Pro 585 Ala Phe Asn Ser Ile Phe Gln Asn Glu Asn Phe Gln Leu Gln Leu Ile 605 595 600 Pro Pro Pro Val Thr Glu Asp 610 <210> 1095 -- <211>- 264 -- -<212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1095 Trp Xaa Ser Thr Thr Ile Trp Lys Ala Gly Pro Pro Ala Gly Thr Gly 5 Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Xaa Thr Arg Gly Phe Trp 25 20 Phe Cys Ser Ser Val Trp Val Ser Ser Arg Leu Leu Lys Met Asn Arg Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp

1092

55 60 50 Cys Ile Gly Thr Val Asp Ser Arg Ala Glu Ser Ile Asp Lys Lys Ile 70 Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln Ile Lys Lys 90 Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys Ala Leu Arg Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp Asn Leu Ala Gln Gln Ser Phe Asn Met Glu Gln Ala Asn Tyr Thr Ile Gln Ser Leu 135 Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val Lys Glu 145 150 Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu Asp Leu 165 170 Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile Gln Glu 185 Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp Asp Leu 195 205 Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp Glu Asp 215 Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro Glu Gly 230 235 Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp Glu Phe 250 255 245 Gly Leu Pro Gln Ile Pro Ala Ser 260

<210> 1096

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1096

Ser Cys Cys Phe Leu Lys Arg Leu Gln Ala Ser Phe Pro Arg Thr Ala 1 5 10 15

.\	/al	Ser	Phe	Glu 20	Pro	Leu	Ala	Gly	Asp 25	Met	Pro	Arg	Gly	Arg 30	Lys	Ser
F	Arg	Arg	Arg 35	Arg	Asn	Ala	Arg	Ala 40	Ala	Glu	Glu	Asn	Arg 45	Asn	Asn	Arg
I	-ys	Ile 50	Gln	Ala	Ser	Glu	Ala 55	Ser	Glu	Thr	Pro	Met 60	Ala	Ala	Ser	Val
,	/al 65	Ala	Ser	Thr	Pro	Glu 70	Asp	Asp	Leu	Ser	Gly 75	Pro	Glu	Glu	Asp	Pro 80
S	Ser	Thr	Pro	Glu	Glu 85	Ala	Ser	Thr	Thr	Pro 90	Glu	Glu	Ala	Ser	Ser 95	Thr
P	Ala	Gln	Ala	Gln 100	Lys	Pro	Ser	Val	Pro 105	Arg	Ser	Asn	Phe	Gln 110	Gly	Thr
I	Lys	Lys	Ser 115	Leu	Leu	Met	Ser	Ile 120	Leu	Ala	Leu	Ile	Phe 125	Ile	Met	Gly
P	Asn	Ser 130	Ala	Lys	Glu	Ala	Leu 135	Val	Trp	Lys	Val	Leu 140	Gly	Lys	Leu	Gly
	let .45	Gln	Pro	Gly	Arg	Gln 150		Ser			Gly 155	Asp	Pro	Lys	Lys	Ile 160
V	al	Thr	Glu	Glu	Phe 165	Val	Arg	Arg	Gly	туг 170	Leu	Ile	Tyr	Lys	Pro 175	Val
P	ro	Arg	Ser	Ser 180	Pro	Val	Glu	Tyr	Glu 185	Phe	Phe	Trp	Gly	Pro 190	Arg	Ala
Н	is	Val	Glu 195	Ser	Ser	Lys	Leu	Lys 200	Val	Met	His	Phe	Val 205	Ala	Arg	Val
A	rg	Asn 210	Arg	Суѕ	Ser	Lys	Asp 215	Trp	Pro	Cys	Asn	Tyr 220	Asp	Trp	Asp	Ser
	sp 25	Asp	Asp	Ala	Glu	Val 230	Glu	Ala	Ile	Leu	Asn 235	Ser	Gly	Ala	Arg	Gly 240
т	yr	Ser	Ala	Pro												

<sup>&</sup>lt;210> 1097

<sup>&</sup>lt;211> 132

<sup>&</sup>lt;212> PRT

1094

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<213> Homo sapiens
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<400> 1097

Ala Thr Met Val Arg Met Asn Val Leu Ala Asp Ala Leu Lys Ser Ile 1 5 10 15

Asn Asn Ala Glu Lys Arg Gly Lys Arg Gln Val Leu Ile Arg Pro Cys
20 25 30

Ser Lys Val Ile Val Arg Phe Leu Thr Val Met Met Lys His Gly Tyr 35 40 45

Ile Gly Glu Phe Glu Ile Ile Asp Asp His Arg Ala Gly Lys Ile Val
50 55 60

Val Asn Leu Thr Gly Arg Leu Asn Lys Cys Gly Val Ile Ser Pro Arg 65 70 75 80

Phe Asp Val Gln Leu Lys Asp Leu Glu Lys Trp Gln Asn Asn Leu Leu 85 90 95

Pro Ser Arg Gln Phe Gly Phe Ile Val Leu Thr Thr Ser Ala Gly Ile 100 105 110

Met Asp His Glu Glu Ala Arg Arg Lys His Thr Gly Gly Lys Ile Leu 115 120 125

Gly Phe Phe Phe 130

<210> 1098

<211> 371

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1098

Ala Arg His Thr Pro Ala Gln Arg His Asp His Pro Gln Glu Gly Asn 1 5 10 15

Ile	Pro	Val	Cys 20	Val	Gln	Leu	Ala	Val 25	Cys	Ala	Leu	Pro	Leu 30	Pro	Val
Val	Pro	Gly 35	Pro	Glu	His	Cys	Gly 40	Pro	Gln	Arg	Xaa	Leu 45	Gln	Pro	Leu
Val	Tyr 50	Pro	Leu	Ala	Gln	Val 55	Ile	Ile	Gly	Cys	Ile 60	Lys	Leu	Ile	Pro
Thr 65	Ala	Arg	Phe	Tyr	Pro 70	Leu	Arg	Met	His	Cys 75	Ile	Arg	Ala	Leu	Thr 80
Leu	Leu	Ser	Gly	Ser 85	Ser	Gly	Ala	Phe	Ile 90	Pro	Val	Leu	Pro	Phe 95	Ile
Leu	Glu	Met	Phe 100	Gln	Gln	Val	Asp	Phe 105	Asn	Arg	Lys	Pro	Gly 110	Arg	Met
Ser	Ser	Lys 115	Pro	Ile	Asn	Phe	Ser 120	Val	Ile	Leu	Lys	Leu 125	Ser	Asn	Val
Asn	Leu 130	Gln	Glu	Lys	Ala	Tyr 135	Arg	Asp	Gly	Leu	Val 140	Glu	Gln	Leu	туг
Asp 145	Leu	Thr	Leu	Glu	туr 150	Leu	His	Ser	Gln	Ala 155	His	Cys	Ile	Gly	Phe 160
Pro	Glu	Leu	Val	Leu 165	Pro	Val	Val	Leu	Gln 170	Leu	Lys	Ser	Phe	Leu 175	Arg
Glu	Cys	Lys	Val 180	Ala	Asn	Tyr	Cys	Arg 185	Xaa	Val	Gln	Gln	Leu 190	Leu	Gly
Lys	Val	Gln 195	Glu	Asn	Ser	Ala	<b>Tyr</b> 200	Ile	Cys	Ser	Arg	Arg 205	Gln	Arg	Val
Ser	Phe 210	Gly	Val	Ser	Glu	Gln 215	Gln	Ala	Val	Glu	Ala 220	Trp	Glu	Lys	Leu
Thr 225	Arg	Glu	Glu	Gly	Thr 230	Pro	Leu	Thr	Leu	Туг 235	Tyr	Ser	His	Trp	Arg 240
Lys	Leu	Arg	Asp	Arg 245	Glu	Ile	Gln	Leu	Glu 250	Ile	Ser	Gly	Lys	Glu 255	Arg
Leu	Glu	Asp	Leu 260	Asn	Phe	Pro	Glu	11e 265	Lys	Arg	Arg	Lys	Met 270	Ala	Asp
Arg	Lys	Asp	Glu	Asp	Arg	Lys	Gln 280	Phe	Lys	Asp	Leu	Phe	Asp	Leu	Asn

Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Ser Glu Arg Gly Ile Leu 290 295 300

Arg Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu Glu Asp Glu 305 310 315 320

Glu Glu Glu Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu Trp Ser Trp 325 330 335

Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly Glu Leu Gln 340 345 350

Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu Gln Leu Ser 355 360 365

Glu Asp Asp 370

<210> 1099

<211> 321

<212> PRT

<213> Homo sapiens

<400> 1099

Glu Arg Thr Leu Gly Gln Pro Gly Phe Leu Gly Cys Pro Arg Gln Pro

His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala 20 25 30

Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu 35 40 . 45

Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg
50 55 60

Ile Leu Ala Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser 65 70 75 80

Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp 85 90 95

Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser 100 105 110

Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln
115 120 125

Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg

1097

130 135 140 Glu Pro Phe Val Ala Gln Phe Ser Leu Pro Ser Asn Val Leu Pro Ser 155 150 Leu Val Leu Val Pro Leu His Thr Thr Pro Lys Ala Val Glu Lys Glu 170 Leu Asn Ala Leu Tyr Asp Val Phe Leu Glu Val Ser Gln His Trp Gln 180 185 Ser Lys Asp Val Ile Leu Leu Gly Asp Phe Asn Ala Asp Cys Ala Ser 200 Leu Thr Lys Lys Arg Leu Asp Lys Leu Glu Leu Arg Thr Glu Pro Gly 215 Phe His Trp Val Ile Ala Asp Gly Glu Asp Thr Thr Val Arg Ala Ser 225 Thr His Cys Thr Tyr Asp Arg Val Val Leu His Gly Glu Arg Cys Arg Ser Leu Leu His Thr Ala Ala Ala Phe Asp Phe Pro Thr Ser Phe Gln 265 260 Leu Thr Glu Glu Glu Ala Leu Asn Ile Ser Asp His Tyr Pro Val Glu 280 275 Val Glu Leu Lys Leu Ser Gln Ala His Ser Val Gln Pro Leu Ser Leu 295 300 Thr Val Leu Leu Leu Ser Leu Leu Ser Pro Gln Leu Cys Pro Ala 310 315 Ala

<210> 1100

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1100

Leu Leu Cys Val Phe Tyr Ile Ala Cys Phe Cys Lys Asn Met Leu 1 5 10 15

Gly Asp Glu Arg Leu Val Leu Glu Arg Lys Cys Ser Ser Val Gln Arg 20 25 30

Met His Phe Leu Pro Leu Ile Leu Glu Lys Thr Phe Thr Val Ile Tyr 35 40 45

Met Val Phe Cys Lys Arg Thr Ile Asn Arg Thr Phe 50 55 60

<210> 1101

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the maturally occurring L-amino acids

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1101

Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr
1 5 10 15

Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu 20 25 30

Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ile
50 55 60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu 65 70 75 80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys
85 90 95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu 100 105 110

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Gly 115 120 125

Leu Gly Asp Ser Ph Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser 130 135 140

Thr Cys His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu 225 230 235 240

Ala Ser Gly Leu Thr Pro Ala Glu Arg Pro Trp Pro Pro Ser 245 250

215

<210> 1102 <211> 233 .<212> PRT <213> Homo sapiens

<400> 1102

210

Gly Pro Gly Trp Tyr Pro Ala Pro Leu Arg Leu Phe His Ser Asp Pro 1 5 10 15

Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro 20 25 30

Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys 35 40 45

His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val
50 55 60

Phe Ala Asp Arg Glu Arg Lys Leu Val Leu Glu Asn Leu Glu Asp 65 70 75 80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala 85 90 95

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr 100 105 110

1100

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr 115 120 125

Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu 130 135 140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser 145 150 155 160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala 165 170 175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln 180 185 190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala 195 200 205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu 210 215 220

Gly Asp Arg Glu Val Val Leu Tyr Gly 225 230

<210> 1103

<211> 330

<212> PRT

<213> Homo sapiens

<400> 1103

Cys Gln Leu Arg Ser Ala Ala Gly Val Pro Ser Ser Val Ser Val Ser 1 5 10 15

Pro Arg Asp Pro Ile Ala Met Glu Leu Ser Asp Ala Asn Leu Gln Thr 20 25 30

Leu Thr Glu Tyr Leu Lys Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg
35 40 45

Arg Pro Ala Glu Lys Phe Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr 50 55 60

Pro Leu Leu Leu Thr Leu Leu Glu Lys Ser Gln Asp Asn Val Ile 65 70 75 80

Lys Val Cys Ala Ser Val Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp 85 90 95

Arg Ile Val Glu Asp Glu Pro Asn Lys Ile Cys Glu Ala Asp Arg Val

	•		100					105					110		
Ala	Ile	Lys 115	Ala	Asn	Ile	Val	His 120	Leu	Met	Leu	Ser	Ser 125	Pro	Glu	Glr
Ile	Gln 130	Lys	Gln	Leu	Ser	Asp 135	Ala	Ile	Ser	Ile	Ile 140	Gly	Arg	Glu	Asp
Phe 145	Pro	Gln	Lys	Trp	Pro 150	Asp	Leu	Leu	Thr	Glu 155	Met	Val	Asn	Arg	Phe 160
Gln	Ser	Gly	Asp	Phe 165	His	Val	Ile	Asn	Gly 170	Val	Leu	Arg	Thr	Ala 175	
Ser	Leu	Phe	Lys 180	Arg	Tyr	Arg	His	Glu 185	Phe	Lys	Ser	Asn	Glu 190	Leu	Trp
Thr	Glu	Ile 195	Lys	Leu	Val	Leu	Asp 200	Ala	Phe	Ala	Leu	Pro 205	Leu	Thr	Asn
Leu	Phe 210	Lys	Ala	Thr	Ile	Glu 215	Leu	Cys	Ser	Thr	His 220	Ala	Asn	Asp	Ala
Ser 225	Ala	Leu	Arg	Ile	Leu 230	Phe	Ser	Ser	Leu	11e 235	Leu	Ile	Ser	Lys	Leu 240
Phe	Tyr	Ser	Leu	Asn 245	Phe	Gln	Asp	Leu	Pro 250	Glu	Phe	Phe	Glu	Asp 255	Asn
Met	Glu	Thr	Trp 260	Met	Asn	Asn	Phe	His 265	Thr	Leu	Leu	Thr	Leu 270	Asp	Asn
Lys	Leu	Leu 275	Gln	Thr	Asp	Asp	G1u 280	Glu	Glu	Ala	Gly	Leu 285	Leu	Glu	Leu
Leu	Lys 290	Ser	Gln	Ile	Cys	Asp 295	Asn	Ala	Ala	Leu	Tyr 300	Ala	Gln	Lys	Tyr
Asp 305	Glu	Glu	Phe	Gln	Arg 310	Tyr	Leu	Pro	Arg	Phe 315	Val	Thr	Ala	Ile	Trp 320
Glu	Phe	Thr	Ser	Tyr 325	Asn	Gly	Ser	Arg	Gly 330						

<sup>&</sup>lt;210> 1104

<sup>&</sup>lt;211> 180

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

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<220>
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<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1104
Gly Thr Ser Pro Gly Arg Gly Gly Kaa Gly Val Gly Leu Arg Gly Leu
Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro Met Ala
                                                      30
             20
                                 25
Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro Ala Ala
Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe Gln Arg
Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu Gln Gln
                     70
                                        75
 65
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1103

Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr Val Arg
85 90 95

Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val Asn Phe 100 105 110

Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln Asn Val 115 120 125

Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys Asn Glu 130 135 140

Leu Lys Gln Ala Leu Xaa Val Ser Ala Thr Gly Ser Leu Thr Ser Ser 145 150 155 160

Thr Thr Ser Ser Phe Glu Xaa Leu Thr Gly Xaa Gly Arg Gly Xaa Ser 165 170 175

Xaa Ser Thr Xaa 180

<210> 1105

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1105

Thr Thr Arg Phe Pro Ser Gly Gln Pro Leu Lys Pro Arg Pro Thr Leu

1 5 10 ... 15

Thr Ala Ala Gly Pro Arg Pro Gly Leu Leu Cys Phe Thr Ile Tyr Ile 20 25 30

Met Asn Pro Ser Met Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile 35 40 45

Lys Asn Ser Ser Val Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser 50 55 60

Ala Ser Gly Ser Leu Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu 65 70 75 . 80

Ser Lys Arg Lys His Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser 85 90 95

Pro Gly Val Ile Val Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly
100 105 110

Val Thr Gln Glu Ser Phe Asp Lem Met Ile Lys Glu Asn Pro Ser Ser

1104

115 120 125 Gln Tyr Trp Lys Glu Val Ala Glu Lys Arg Arg Lys Ala Leu Tyr Glu 135 130 Ala Leu Lys Glu Asn Glu Lys Leu His Lys Glu Ile Glu Gln Lys Asp 155 Asn Glu Ile Ala Arg Leu Lys Lys Glu Asn Lys Glu Leu Ala Glu Val 170 Ala Glu His Val Gln Tyr Met Ala Glu Leu Ile Glu Arg Leu Asn Gly 180 185 Glu Pro Leu Asp Asn Phe Glu Ser Leu Asp Asn Gln Glu Phe Asp Ser 200 Glu Glu Glu Thr Val Glu Asp Ser Leu Val Glu Asp Ser Glu Ile Gly 220 210 215 Thr Cys Ala Glu Gly Thr Val Ser Ser Thr Asp Ala Lys Pro Cys 230 235 Ile

<210> 1106

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1106

Phe His Thr Glu Phe Ile Thr Ile Trp Asp Val Arg Gln Cys Ser Asn 1 5 10 15

Lys His Cys Gln His Val Asn Phe Leu Lys Ser Val Gly His Ile Ala 20 25 30

Lys Asn Leu Leu Lys His Asn Cys Ile Phe Cys Phe Arg Ala Leu Leu 35 40 45

Met Phe Cys Arg Ser Asn Val Cys Ile Phe Leu Leu Asn Lys Leu Val 50 55 60

Leu Ile Leu Glu Leu Ser Asp Asp Phe Val Leu Glu Arg Thr Thr Gln 65 70 75 80

Arg Arg Gln Cys Lys Ser Lys Ser

1105

<210> 1107 <211> 124 <212> PRT <213> Homo sapiens <400> 1107 Leu Val Val Leu Lys Arg Arg Pro Glu Lys Ser Gln Gly His Glu His 10 Arg Ala Met Pro Phe Leu Asp Ile Gln Lys Arg Phe Gly Leu Asn Ile 25 Asp Arg Trp Leu Thr Ile Gln Ser Gly Glu Gln Pro Tyr Lys Met Ala Gly Arg Cys His Ala Phe Glu Lys Glu Trp Ile Glu Cys Ala His Gly 55 Ile Gly Tyr Thr Arg Ala Glu Lys Glu Cys Lys Ile Glu Tyr Asp Asp 70 75 Phe Val Glu Cys Leu Leu Arg Gln Lys Thr Met Arg Arg Ala Gly Thr 85 90 Ile Arg Lys Gln Arg Asp Lys Leu Ile Lys Glu Gly Lys Tyr Thr Pro 105 110 100 Pro Pro His His Ile Gly Lys Gly Glu Pro Arg Pro <210> 1108 <211> 299 <212> PRT

<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1108

His 1	Leu	Leu	Cys	Cys 5	Arg	Ala	GIN	Arg	Arg 10	Pro	GIN	Thr	Pro	15	Alč
Ala	Arg	Gly	Leu 20	Glu	Pro	Ala	Gln	Arg 25	Cys	Phe	Glu	Asp	Ala 30	Gly	Xaa
Pro	Pro	Leu 35	Leu	Leu	Ala	Ala	Val 40	Leu	Leu	Gly	Leu	Val 45	Leu	Leu	Val
Val	Leu 50	Leu	Leu	Leu	Leu	Arg 55	His	Trp	Gly	Trp	Gly 60	Leu	Cys	Leu	Ile
65					Ile 70					75					80
				85	Arg				90					95	
			100		Ser			105					110		
		115			Met		120					125			
	130				Glu	135 -					140				
145					150					155					160
				165	Asp				170					175	
			180		Gln			185					190		
		195			Asp		200					205			
_	210	_			Leu	215					220				
225					230 Ala					235	·				240
				245	Arg				250					255	
			260		7	1		265	-3-			•	270		

Gln Ser Phe Leu Glu Tyr Arg Glu Val Val Asp Gly Leu Glu Lys Ala 275 280 285

Ile Tyr Lys Gly Pro Gly Ser Glu Ala Gly Pro 290 295

<210> 1109

<211> 300

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1109

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Leu Arg Asp Leu
1 5 10 15

Leu Thr Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser 20 25 30

Leu Arg Leu Thr Gly Ser Ser Ala Gln Glu Xaa Ala Ser Gly Val Ala 35 40 45

Leu Gly Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser 50 55 60

Ala Gln Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg
65 70 75 80

Asn Ala Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn 85 90 95

Lys Ile Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala 100 105 110

Gly Lys Met Phe Thr Ala Gly Ile Asp Leu Met Asp Met Ala Ser Asp 115 120 125

Ile Leu Gln Pro Lys Gly Asp Asp Val Ala Arg Ile Ser Trp Tyr Leu 130 135 140

Arg Asp Ile Il Thr Arg Tyr Gln Glu Thr Phe Asn Val Ile Glu Arg 145 150 155 160

Cys Pro Lys Pro Val Ile Ala Ala Val His Gly Gly Cys Ile Gly Gly
165 170 175

Gly Val Asp Leu Val Thr Ala Cys Asp Ile Arg Tyr Cys Ala Gln Asp 180 185 Ala Phe Phe Gln Val Lys Glu Val Asp Val Gly Leu Ala Ala Asp Val Gly Thr Leu Gln Arg Leu Pro Lys Val Ile Gly Asn Gln Ser Leu Val 215 Asn Glu Leu Ala Phe Thr Ala Arg Lys Met Met Ala Asp Glu Ala Leu 225 230 235 240 Gly Ser Gly Leu Val Ser Arg Val Phe Pro Asp Lys Glu Val Met Leu 250 Asp Ala Ala Leu Ala Leu Ala Glu Ile Ser Ser Lys Ser Pro Val 265 Ala Cys Arg Ala Pro Arg Ser Thr Cys Cys Ile Pro Ala Thr Ile Arg 275 Trp Pro Arg Ala Ser Thr Thr Trp Arg Pro Gly Thr

<210> 1110

290

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1110

Arg Ser Cys Ala Leu Val Cys Lys His Trp Tyr Arg Cys Leu His Gly
1 5 10 15

295

Asp Glu Asn Ser Glu Val Trp Arg Ser Leu Cys Ala Arg Ser Leu Ala 20 25 30

Glu Glu Ala Leu Arg Thr Asp Ile Leu Cys Asn Leu Pro Ser Tyr Lys
35 40 45

Ala Lys Ile Arg Ala Phe Gln His Ala Phe Ser Thr Asn Asp Cys Ser 50 60

Arg Asn Val Tyr Ile Lys Lys Asn Gly Phe Thr Leu His Arg Asn Pro 65 70 75 80

Ile Ala Gln Ser Thr Asp Gly Ala Arg Thr Lys Ile Gly Phe Ser Glu 85 90 95

1109

Gly Arg His Ala Trp Glu Val Trp Trp Glu Gly Pro Leu Gly Thr Val

100 105 Ala Val Ile Gly Ile Ala Thr Lys Arg Ala Pro Met Gln Cys Gln Gly 120 Tyr Val Ala Leu Leu Gly Ser Asp Asp Gln Ser Trp Gly Trp Asn Leu 130 Val Asp Asn Asn Leu Leu His Asn Gly Glu Val Asn Gly Ser Phe Pro 155 150 Gln Cys Asn Asn Ala Pro Lys Tyr Gln Ile Gly Glu Arg Ile Arg Val 170 165 Ile Leu Asp Met Glu Asp Lys Thr Leu Ala Phe Glu Arg Gly Tyr Glu 185 190 180 Phe Leu Gly Val Ala Phe Arg Gly Leu Pro Lys Val Cys Leu Tyr Pro 200 Ala Val Ser Ala Val Tyr Gly Asn Thr Glu Val Thr Leu Val Tyr Leu 215 Gly Lys Pro Leu Asp Gly 225 230 <210> 1111 <211> 59 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1111 Pro Xaa Leu Thr Lys Gly Asn Lys Ser Trp Xaa Ser Thr Ala Val Xaa

1110

15 10 1 5 Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Pro 25 20 Gln Lys Asn Leu Lys Asn Thr Val Phe Cys Ile Asp Ile Cys Thr Val 40 Cys Val Cys Val Cys Glu Ile Lys Ile Arg Phe 50 <210> 1112 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (228) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1112 Cys Ile Xaa Gly Phe Tyr Phe Ala Val Leu Ala Pro Gln Glu Leu Leu 10 Ile Tyr Glu Met Ala Glu Asn Gly Lys Asn Cys Asp Gln Arg Arg Val 20 25 Ala Met Asn Lys Glu His His Asn Gly Asn Phe Thr Asp Pro Ser Ser Val Asn Glu Lys Lys Arg Arg Glu Arg Glu Glu Arg Gln Asn Ile Val 55 Leu Trp Arg Gln Pro Leu Ile Thr Leu Gln Tyr Phe Ser Leu Glu Ile 70 65 Leu Val Ile Leu Lys Glu Trp Xaa Ser Lys Leu Trp His Arg Gln Ser 90 85

Ile Val Val Ser Phe Leu Leu Leu Leu Ala Val Leu Ile Ala Thr Tyr 100 105 Tyr Val Glu Gly Val His Gln Gln Tyr Val Gln Arg Ile Glu Lys Gln Phe Leu Leu Tyr Ala Tyr Trp Ile Gly Leu Gly Ile Leu Ser Ser Val 135 Gly Leu Gly Thr Gly Leu His Thr Phe Leu Leu Tyr Leu Gly Pro His 155 145 150 Ile Ala Ser Val Thr Leu Ala Ala Tyr Glu Cys Asn Ser Val Asn Phe 170 Pro Glu Pro Pro Tyr Pro Asp Gln Ile Ile Cys Pro Asp Glu Glu Gly 185 Thr Glu Gly Thr Ile Ser Leu Trp Ser Ile Ile Ser Lys Val Arg Ile 195 200 Glu Ala Cys Met Trp Gly Ile Gly Thr Ala Ile Gly Glu Leu Pro Pro 215 Tyr Phe Met Xaa Arg Ala Ala Arg Leu Ser Gly Ala Glu Pro Asp Asp . .230 235 Glu Glu Tyr Gln Glu Phe Glu Glu Met Leu Glu His Ala Glu Ser Ala 250 . 255 Gln Asp Phe Ala Ser Arg Ala Lys Leu Ala Val Gln Lys Leu Val Gln 265 Lys Val Gly Phe Phe Gly Ile Leu Ala Cys Ala Ser Ile Pro Asn Pro 280 Leu Phe Asp Leu Ala Gly Ile Thr Cys Gly His Phe Leu Val Pro Phe 290 295 Trp Thr Phe Phe Gly Ala Thr Leu Ile Gly Lys Ala Ile Ile Lys Met 305 310 315 His Ile Gln Lys Ile Phe Val Ile Ile Thr Phe Ser Lys His Ile Val 330 Glu Gln Met Val Ala Phe Ile Gly Ala Val Pro Gly Ile Gly Pro Ser 340 Leu Gln Lys Pro Phe Gln Glu Tyr Leu Glu Ala Gln Arg Gln Lys Leu 360 355

·

PCT/US00/05882

His His Lys Ser Glu Met Gly Thr Pro Gln Gly Glu Asn Trp Leu Ser 370 375 380

Trp Met Phe Glu Lys Leu Val Val Val Met Val Cys Tyr Phe Ile Leu 385 390 395 400

Ser Ile Ile Asn Ser Met Ala Gln Ser Tyr Ala Lys Arg Ile Gln Gln 405 410 415

Arg Leu Asn Ser Glu Glu Lys Thr Lys 420 425

<210> 1113

WO 00/55350

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1113

Xaa Ile Glu Ile Asn Pro His Val Lys Gly Thr\_Lys Ala Gly Ala Pro 1 5 10 15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu 20 25 30

Phe Gly Thr Ser Ser Ser Thr Pro Ala Arg Pro Ser Ser His His Ser 35 40 45

Ala Cys Phe Leu Gly Pro Glu Ile Met Pro Leu Gly Leu Leu Trp Leu 50 55 60

Gly Leu Ala Leu Leu Gly Ala Leu His Ala Gln Ala Gln Asp Ser Thr
65 70 75 80

Ser Asp Leu Ile Pro Ala Pro Pro Leu Ser Lys Val Pro Leu Gln Gln 85 90 95

Asn Phe Gln Asp Asn Gln Phe Gln Gly Lys Trp Tyr Val Val Gly Leu 100 105 110

Ala Gly Asn Ala Ile Leu Arg Glu Asp Lys Asp Pro Gln Lys Met Tyr 115 120 125

Ala Thr Ile Tyr Glu Leu Lys Glu Asp Lys Ser Tyr Asn Val Thr Ser

140

135

130

Val Leu Phe Arg Lys Lys Cys Asp Tyr Trp Ile Arg Thr Phe Val 155 150 Pro Gly Cys Gln Pro Gly Glu Phe Thr Leu Gly Asn Ile Lys Ser Tyr 170 Pro Gly Leu Thr Ser Tyr Leu Val Arg Val Val Ser Thr Asn Tyr Asn 180 185 Gln His Ala Met Val Phe Phe Lys Lys Val Ser Gln Asn Arg Glu Tyr 200 Phe Lys Ile Thr Leu Tyr Gly Arg Thr Lys Glu Leu Thr Ser Glu Leu . 215 Lys Glu Asn Phe Ile Arg Phe Ser Lys Ser Leu Gly Leu Pro Glu Asn 225 230 His Ile Val Phe Pro Val Pro Ile Asp Gln Cys Ile Asp Gly 245 250 <210> 1114 <211> 248 <212> PRT <213> Homo sapiens <400> 1114 Ala Ser Glu Glu Ala Asn Pro Ala Gly Ile Arg Ala Ile Arg Thr Ala Thr Met Thr Val Gly Lys Ser Ser Lys Met Leu Gln His Ile Asp Tyr 25 Arg Met Arg Cys Ile Leu Gln Asp Gly Arg Ile Phe Ile Gly Thr Phe 35 40 Lys Ala Phe Asp Lys His Met Asn Leu Ile Leu Cys Asp Cys Asp Glu Phe Arg Lys Ile Lys Pro Lys Asn Ser Lys Gln Ala Glu Arg Glu Glu 70 75 Lys Arg Val Leu Gly Leu Val Leu Leu Arg Gly Glu Asn Leu Val Ser 85 Met Thr Val Glu Gly Pr Pro Pro Lys Asp Thr Gly Ile Ala Arg Val 105 110 100

1114

Pro Leu Ala Gly Ala Ala Gly Gly Pro Gly Ile Gly Arg Ala Ala Gly 120 115 Arg Gly Ile Pro Ala Gly Val Pro Met Pro Gln Ala Pro Ala Gly Leu 130 135 Ala Gly Pro Val Arg Gly Val Gly Pro Ser Gln Gln Val Met Thr Pro Gln Gly Arg Gly Thr Val Ala Ala Ala Ala Ala Ala Ala Thr Ala 165 170 Ser Ile Ala Gly Ala Pro Thr Gln Tyr Pro Pro Gly Arg Gly Pro 185 180 Pro Pro Pro Met Gly Arg Gly Ala Pro Pro Pro Gly Met Met Gly Pro 200 Pro Pro Gly Met Arg Pro Pro Met Gly Pro Pro Met Gly Ile Pro Pro 220 210 215 Gly Arg Gly Thr Pro Met Gly Met Pro Pro Pro Gly Met Arg Pro Pro 235 Pro Pro Gly Met Arg Gly Leu Leu 245

<210> 1115 <211> 777

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (32) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1115 Leu Thr Lys Gly Xaa Lys Ser Trp Xaa Ser Thr Ala Val Xaa Thr Ala 5 Leu Glu Leu Val Xaa Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Xaa 25 Pro Pro Leu Gly Ser Ser Pro Leu Gly Arg Arg Phe Arg Val Leu Ser Ser Leu Arg Arg Ser Pro Met Phe Glu Glu Lys Ala Ser Ser Pro Ser 50 Gly Lys Met Gly Gly Glu Glu Lys Pro Ile Gly Ala Gly Glu Glu Lys Gln Lys Glu Gly Gly Lys Lys Asn Lys Glu Gly Ser Gly Asp Gly Gly Arg Ala Glu Leu Asn Pro Trp Pro Glu Tyr Ile Tyr Thr Arg Leu 100 105 Glu Met Tyr Asn Ile Leu Lys Ala Glu His Asp Ser Ile Leu Ala Glu 115 Lys Ala Glu Lys Asp Ser Lys Pro Ile Lys Val Thr Leu Pro Asp Gly 135 Lys Gln Val Asp Ala Glu Ser Trp Lys Thr Thr Pro Tyr Gln Ile Ala 155 145 Cys Gly Ile Ser Gln Gly Leu Ala Asp Asn Thr Val Ile Ala Lys Val 170 Asn Asn Val Val Trp Asp Leu Asp Arg Pro Leu Glu Glu Asp Cys Thr 185 Leu Glu Leu Leu Lys Phe Glu Asp Glu Glu Ala Gln Ala Val Tyr Trp 200 195 His Ser Ser Ala His Ile Met Gly Glu Ala Met Glu Arg Val Tyr Gly

215

210

220

Gly 225	Cys	Leu	Cys	Tyr	Gly 230	Pro	Pro	Ile	Glu	Asn 235	Gly	Phe	Tyr	Tyr	Asp 240
Met	Tyr	Leu	Glu	Glu 245	Gly	Gly	Val	Ser	Ser 250	Asn	Asp	Phe	Ser	Ser 255	Leu
Glu	Ala	Leu	Cys 260	Lys	Lys	Ile	Ile	Lys 265	Glu	Lys	Gln	Ala	Phe 270	Glu	Arg
Leu	Glu	Val 275	_	Lys	Glu	Thr	Leu 280	Leu	Ala	Met	Phe	Lys 285	Tyr	Asn	Lys
Phe	Lys 290	Суз	Arg	Ile	Leu	Asn 295	Glu	Lys	Val	Asn	Thr 300	Pro	Thr	Thr	Thr
Val 305	Tyr	Arg	Суз	Gly	Pro 310	Leu	Ile	Asp	Leu	Cys 315	Arg	Gly	Pro	His	Val 320
			-	325		_			330	Ile				335	
			340					345		Thr			350		
Gly	Tle	Sar	Dha	Dro	Acn	Pro	T.VC	Met	Len	T.VS	Glu	Trp	Glu	Lvs	Phe
	- 1-	355	-				360			' -		365-		=	
Gln	Glu 370	355 Glu	Ala	Lys	Asn	Arg 375	360 Asp	His	Arg	Lys	Ile 380	365-	Arg	Asp	Gln
Glu 385	Glu 370 Leu	355 Glu Tyr	Ala	Lys Phe	Asn His 390	Arg 375 Glu	360 Asp Leu	His	Arg Pro	Lys Gly 395	Ile 380 Ser	365- Gly Cys	Arg Phe	Asp Phe	Gln Leu 400
Glu 385 Pro	Glu 370 Leu Lys	355 Glu Tyr Gly	Ala Phe Ala	Lys Phe Tyr 405	Asn His 390	Arg 375 Glu Tyr	360 Asp Leu Asn	His Ser Ala	Arg Pro Leu 410	Lys Gly 395	Ile 380 Ser	365- Gly Cys	Arg Phe	Asp Phe Arg 415	Gln Leu 400 Ser
Glu 385 Pro	Glu 370 Leu Lys	355 Glu Tyr Gly	Ala Phe Ala Lys 420	Lys Phe Tyr 405 Arg	Asn His 390 Ile Gly	Arg 375 Glu Tyr	360 Asp Leu Asn Gln	His Ser Ala Glu 425	Arg Pro Leu 410	Lys Gly 395 Ile	Ile 380 Ser Glu	365-Gly Cys Phe	Arg Phe Ile Asn 430	Asp Phe Arg 415	Gln Leu 400 Ser
Glu 385 Pro Glu Asn	Glu 370 Leu Lys Tyr	355 Glu Tyr Gly Arg 435	Ala Phe Ala Lys 420 Leu	Lys Phe Tyr 405 Arg	Asn His 390 Ile Gly Met	Arg 375 Glu Tyr Phe	360 Asp Leu Asn Gln Ser 440	His Ser Ala Glu 425 Gly	Arg Pro Leu 410 Val	Lys Gly 395 Ile Val	Ile 380 Ser Glu Thr	Gly Cys Phe Pro His 445	Arg Phe Ile Asn 430	Asp Phe Arg 415 Ile Ser	Gln Leu 400 Ser Phe
Glu 385 Pro Glu Asn	Glu 370 Leu Lys Tyr Ser Met 450	355 Glu Tyr Gly Arg 435 Phe	Ala Phe Ala Lys 420 Leu Ser	Lys Phe Tyr 405 Arg Trp	Asn His 390 Ile Gly Met	Arg 375 Glu Tyr Phe Thr Val 455	Asp Leu Asn Gln Ser 440	His Ser Ala Glu 425 Gly Lys	Arg Pro Leu 410 Val His	Lys Gly 395 Ile Val Trp	Ile 380 Ser Glu Thr Gln Phe 460	Gly Cys Phe Pro His 445	Arg Phe Ile Asn 430 Tyr	Asp Phe Arg 415 Ile Ser	Gln Leu 400 Ser Phe Glu
Glu 385 Pro Glu Asn Asn	Glu 370 Leu Lys Tyr Ser Met 450 Asn	355 Glu Tyr Gly Arg 435 Phe	Ala Phe Ala Lys 420 Leu Ser	Lys Phe Tyr 405 Arg Trp Phe	Asn His 390 Ile Gly Met Glu His 470	Arg 375 Glu Tyr Phe Thr Val 455 Cys	360 Asp Leu Asn Gln Ser 440 Glu Leu	His Ser Ala Glu 425 Gly Lys Met	Arg Pro Leu 410 Val His	Lys Gly 395 Ile Val	Ile 380 Ser Glu Thr Gln Phe 460	Gly Cys Phe Pro His 445 Ala	Arg Phe Ile Asn 430 Tyr Leu Pro	Asp Phe Arg 415 Ile Ser Lys	Gln Leu 400 Ser Phe Glu Pro Ser 480

Asn	Glu	Leu	Ser 500	Gly	Ala	Leu	Thr	Gly 505	Leu	Thr	Arg	Val	Arg 510	Arg	Phe
Gln	Gln	Asp 515	Asp	Ala	His	Ile	Phe 520	Cys	Ala	Met	Glu	Gln 525	Ile	Glu	Asp
Glu	Ile 530	Lys	Gly	Cys	Leu	Asp 535	Phe	Leu	Arg	Thr	Val 540	Tyr	Ser	Val	Phe
Gly 545	Phe	Ser	Phe	Lys	Leu 550	Asn	Leu	Ser	Thr	Arg 555	Pro	Glu	Lys	Phe	Leu 560
Gly	Asp	Ile	Glu	Val 565	Trp	Asp	Gln	Ala	Glu 570	Lys	Gln	Leu	Glu	Asn 575	Ser
Leu	Asn	Glu	Phe 580	Gly	Glu	Lys	Trp	Glu 585	Leu	Asn	Ser	Gly	Asp 590	Gly	Ala
Phe	Tyr	Gly 595	Pro	Lys	Ile	Asp	11e 600	Gln	Ile	Lys	Asp	Ala 605	Ile	Gly	Arg
Tyr	His 610	Gln	Суз	Ala	Thr	Ile 615	Gln	Leu	Asp	Phe	Gln 620	Leu	Pro	Ile	Arg
Phe 625	Asn	Leu	Thr	Tyr	Val 630		His	Asp	Gly	Asp 635	Asp	Lys	Lys	Arg	Pro 640
Val	Ile	Val	His	Arg 645	Ala	Ile	Leu	Gly	Ser 650	Val	Glu	Arg	Met	Ile 655	
Ile	Leu	Thr	Glu 660	Asn	Tyr	Gly	Gly	Lys 665	Trp	Pro	Phe	Trp	Leu 670	Ser	Pro
Arg	Gln	Val 675	Met	Val	Val	Pro	Val 680	Gly	Pro	Thr	Cys	Asp 685	Glu	Tyr	Ala
Gln	Lys 690	Val	Arg	Gln	Gln	Phe 695	His	Asp	Ala	Lys	Phe 700	Met	Ala	Asp	Ile
Asp 705	Leu	Asp	Pro	Gly	Cys 710	Thr	Leu	Asn	Lys	Lys 715	Ile	Arg	Asn	Ala	Gln 720
Leu	Ala	Gln	Tyr	Asn 725	Phe	Ile	Leu	Val	Val 730	Gly	Glu	Lys	Glu	Lys 735	Ile
Ser	Gly	Thr	Val 740	Asn	Ile	Arg	Thr	Arg 745	Asp	Asn	Lys	Val	His 750	Gly	Glu
Arg	Thr	Ile 755	Ser	Glu	Thr	Ile	Glu 760	Arg	Leu	Gln	Gln	Leu 765	Lys	Glu	Phe

WO 00/55350

Arg Ser Lys Gln Ala Glu Glu Glu Phe 770 775

<210> 1116 <211> 360 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1116 Thr Thr Ser Ala Xaa Arg Trp Asp Gly Thr Arg Gly Arg Thr Arg Gly Arg Thr Xaa Gly Phe Gly Asn Leu Ser Ile Thr Gln Xaa Trp Met Met 20 Trp Ala Met Val Ser Xaa Met Glu Ile Asp Gln Pro Ala Gly Thr Gly Thr Leu Ser Arg Thr Asn Pro Pro Thr Gln Lys Pro Pro Ser Pro Pro

Glu Pro Val Lys Pro Pro Thr Val Pro Asn Asp Tyr Met Thr Ser Pro 85 90 95

Met Ser Gly Arg Gly Thr Leu Gly Arg Asn Thr Pro Tyr Lys Thr Leu

55

70

65

Ala Arg Leu Gly Ser Gln His Ser Pro Gly Arg Thr Ala Ser Leu Asn

Gln Arg Pro Arg Thr His Ser Gly Ser Ser Gly Gly Ser Gly Ser Arg Glu Asn Ser Gly Ser Ser Ser Ile Gly Ile Pro Ile Ala Val Pro Thr Pro Ser Pro Pro Thr Ile Gly Pro Ala Ala Pro Gly Ser Ala Pro Gly Ser Gln Tyr Gly Thr Met Thr Arg Gln Ile Ser Arg His Asn Ser Thr Thr Ser Ser Thr Ser Ser Gly Gly Tyr Arg Arg Thr Pro Ser Val Thr Ala Gln Phe Ser Ala Gln Pro His Val Asn Gly Gly Pro Leu Tyr Ser Gln Asn Ser Ile Ser Ile Ala Pro Pro Pro Pro Met Pro Gln Leu Thr Pro Gln Ile Pro Leu Thr Gly Phe Val Ala Arg Val Gln Glu Asn Ile Ala Asp Ser Pro Thr Pro Pro Pro Pro Pro Pro Pro Asp Asp Ile Pro Met Phe Asp Asp Ser Pro Pro Pro Pro Pro Pro Pro Pro Val Asp Tyr Glu Asp Glu Glu Ala Ala Val Val Gln Tyr Asn Asp Pro Tyr Ala Asp Gly Asp Pro Ala Trp Ala Pro Lys Asn Tyr Ile Glu Lys Val Val Ala Ile Tyr Asp Tyr Thr Lys Asp Lys Asp Glu Leu Ser Phe Met Glu Gly Ala Ile Ile Tyr Val Ile Lys Lys Asn Asp Asp Gly Trp Tyr Glu Gly Val Cys Asn Arg Val Thr Gly Leu Phe Pro Gly Asn Tyr Val Glu Ser Ile Met His Tyr Thr Asp 

<210> 1117 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1117 Pro Ala Arg Leu Gly Ile Thr Cys His Ser Pro Ala Ile Leu Ser Thr Ala Leu Trp Gly Gly Ser Ser Pro Ile Pro Asp Ala Pro Thr Thr Gln Trp Lys Val Thr Lys Pro Ala Pro Cys Pro Arg Pro Arg Arg Val Glu 40 Pro Val Cys Ser Gly Leu Gln Ala Gln Ile Leu His Cys Tyr Arg Asp 55 Arg Pro His Glu Val Leu Leu Cys Ser Asp Leu Val Lys Ala Tyr Gln 65 70 75 Arg Cys Val Ser Ala Xaa His Lys Gly 85

<210> 1118 <211> 347 <212> PRT <213> Homo sapiens

<400> 1118

Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu

Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val 25

Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn 35 40

Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile

His Glu Asp Ser Thr Asn Arg Arg Leu Ser Glu Leu Leu Arg Tyr

65					70					75					80
His	Thr	Ser	Gln	Ser 85	-	Asp	Glu	Met	Thr	Ser	Leu	Ser	Glu	Tyr 95	Val
Ser	Arg	Met	Lys 100	Glu	Thr	Gln	Lys	Ser 105		Tyr	Tyr	Ile	Thr 110	Gly	Glu
Ser	Lys	Glu 115		Val	Ala	Asn	Ser 120	Ala	Phe	Val	Glu	Arg 125	Val	Arg	Lys
Arg	Gly 130		Glu	Val	Val	Туг 135		Thr	Glu	Pro	Ile 140	Asp	Glu	Tyr	Cys
Val 145	Gln	Gln	Leu	Lys	Glu 150		Asp	Gly	Lys	Ser 155	Leu	Val	Ser	Val	Thr 160
Lys	Glu	Gly	Leu	Glu 165	Leu	Pro	Glu	Asp	Glu 170	Glu	Glu	Lys	Lys	Lys 175	Met
Glu	Glu	Ser	Lys 180	Ala	Lys	Phe	Glu	Asn 185	Leu	Cys	Lys	Leu	Met 190	Lys	Glu
·Ile	Leu	Asp 195	Lys	Lys	Val	Glu	Lys 200	Val	Thr	Ile	Ser	Asn 205	Arg	Leu	Val
Ser	Ser 210	Pro	Суз	Суз	Ile	Val 215	Thr	Ser	Thr	Tyr	Gly 220	Trp	Thr	Ala	Asn
225			,		230					Arg 235					240
				245	•				250	Ile				255	
			260					265		Ala			270		
		275					280			Glu		285			
	290					295				His	300				
305					310				•	Glu 315					320
				325				_	330	Ile	Pro	Pro	Leu	Glu 335	Gly
Asp	Glu.	Asp	Ala	Ser	Arg	Met	Glu	GLu	val	Asp					

1122

340

<210> 1119

<211> 293

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

345

<400> 1119

Pro Gly Ser Pro Asp Val Asn Arg Ala Val Val Arg Pro Pro Pro Pro 1 5 10 15

Pro Pro Pro Pro Pro Ala Pro Gln Pro Thr Met Ser Arg Arg Lys
20 25 30

Gln Gly Lys Pro Gln His Leu Ser Lys Arg Glu Phe Ser Pro Glu Pro 35 40 45

Leu Glu Ala Ile Leu Thr Asp Asp Glu Pro Asp His Gly Pro Leu Gly 50 55 60

Ala Pro Glu Gly Asp His Asp Leu Leu Thr Cys Gly Gln Cys Gln Met 65 70 75 80

Asn Phe Pro Leu Gly Asp Ile Leu Ile Phe Ile Glu His Lys Arg Lys
. 85 90 95

Gln Cys Asn Gly Ser Leu Cys Leu Glu Lys Ala Val Asp Lys Pro Pro 100 105 110

Ser Pro Ser Pro Ile Glu Met Lys Lys Ala Ser Asn Pro Val Glu Val 115 120 125

Gly Ile Gln Val Thr Pro Glu Asp Asp Asp Cys Leu Ser Thr Ser Ser 130 135 140

Arg Gly Ile Cys Pro Lys Gln Glu His Ile Ala Asp Lys Leu Leu His 145 150 155 160

Trp Arg Gly Leu Ser Ser Pro Arg Ser Xaa Thr Trp Ser Ser Asn Pro 165 170 175

His Ala Trp Asp Glu Cys Arg Ile Cys Pro Ala Gly Ile Cys Lys Asp 180 185 190

Glu Pro Ser Ser Tyr Thr Cys Thr Thr Cys Lys Gln Pro Phe Thr Ser 195 200 205

Ala Trp Phe Leu Leu Gln His Ala Gln Asn Thr His Gly Leu Arg Ile 210 215 220

Tyr Leu Glu Ser Glu His Gly Ser Pro Leu Thr Pro Arg Val Gly Ile 225 230 235 240

Pro Ser Gly Leu Gly Ala Glu Cys Pro Ser Gln Pro Pro Leu His Gly
245 250 255

Ile His Ile Ala Asp Asn Asn Pro Phe Asn Leu Leu Arg Ile Pro Gly 260 265 270

Ser Val Ser Arg Glu Ala Ser Gly Leu Gly Arg Arg Ala Leu Ser Thr 275 280 285

His Ser Pro Pro Val 290

WO 00/55350

<210> 1120

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1120

Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp 1 5 10 15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys
20 25 30

Phe Lys Leu Lys Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg
35 40 45

Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp 50 55 60

Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala 65 70 75 80

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln 85 90 95

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala 100 (1) 105 110

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His

1124

115 120 125 Arg Ala Ala Leu Ile Ala Arg Wal Thr Asn Val Glu Trp Leu Leu Asp 135 Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg 150 155 Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His 165 170 Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro 185 <210> 1121 <211> 217 <212> PRT <213> Homo sapiens <400> 1121 Gly Arg Lys Trp Phe Cys Pro Tyr Lys Thr Trp Arg Lys Ala Phe Leu Ser Pro Arg Lys Arg His Val Met Ser Gln Ser Cys Gly Ala Arg Ala 20 25 Glu Val Gln Ala Thr Gly Ser Asp Gly Ala Pro Thr Lys Ala Leu Gly 40 . 45 . Leu Val Arg Val Ala Ala Val Ser Ser Asp Ser Cys Val Val Pro Met 55 Val Glu Lys Lys Thr Ser Val Arg Ser Gln Asp Pro Gly Gln Arg Arg Val Leu Asp Arg Ala Ala Arg Gln Arg Arg Ile Asn Arg Gln Leu Glu Ala Leu Glu Asn Asp Asn Phe Gln Asp Asp Pro His Ala Gly Leu Pro 100 105 Gln Leu Gly Lys Arg Leu Pro Gln Phe Asp Asp Asp Ala Asp Thr Gly 120 Lys Lys Lys Lys Thr Arg Gly Asp His Phe Lys Leu Arg Phe Arg

Lys Asn Phe Gln Ala Leu Leu Glm Gln Asn Leu S r Val Ala Glu

155

150

145

Gly Pro Asn Tyr Leu Thr Ala Cys Ala Gly Pro Pro Ser Arg Pro Gln 165 170 175

Arg Pro Phe Cys Ala Val Cys Gly Phe Pro Ser Pro Tyr Thr Cys Val 180 185 190

Ser Cys Gly Ala Arg Tyr Cys Thr Val Arg Cys Leu Gly Thr His Gln 195 200 205

Glu Thr Arg Cys Leu Lys Trp Thr Val 210 215

<210> 1122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1122

Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys 1 5 10 15

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile 20 25 30

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn 35 40 45

Asn Lys Thr Lys His Ile Glu Glu Glu Asn Leu Ile Asp Glu Asp Phe 50 55 60

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu
65 70 75 80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln 85 90 95

Met Gln Asn Pro Tyr Ser Ser His Ser Ser Met Pro Arg Pro Asp Tyr
100 105 110

<210> 1123

<211> 216

<212> PRT

<213> Homo sapiens

<400> 1123
Gly Lys Leu Val Cys Gly Met Val Ser Tyr Leu Asn Asp Leu Pro Ser
1 5 10 15

Gln Arg Ile Gln Pro Gln Gln Val Ala Val Trp Pro Thr Met Val Asp 20 25 30

Ile Asn Ser Pro Glu Ser Leu Thr Glu Ala Tyr Lys Leu Arg Ala Ala 35 40 45

Arg Leu Val Glu Ile Ala Ala Lys Asn Leu Gln Lys Glu Val Ile His 50 55 60

Arg Lys Ser Lys Glu Val Ala Trp Asn Leu Thr Ser Val Asp Leu Val 65 70 75 80

Arg Ala Ser Glu Ala His Cys His Tyr Val Val Val Lys Leu Phe Ser 85 90 95

Glu Lys Leu Lys Ile Gln Asp Lys Ala Ile Gln Ala Val Leu Arg
100 105 110

Ser Leu Cys Leu Leu Tyr Ser Leu Tyr Gly Ile Ser Gln Asn Ala Gly
115 120 125

Asp Phe Leu Gln Gly Ser Ile Met Thr Glu Pro Gln Ile Thr Gln Val 130 135 140

Asn Gln Arg Val Lys Glu Leu Leu Thr Leu Ile Arg Ser Asp Ala Val 145 150 155 160

Ala Leu Val Asp Ala Phe Asp Phe Gln Asp Val Thr Leu Gly Ser Val 165 170 175

Leu Gly Arg Tyr Asp Gly Asn Val Tyr Glu Asn Leu Phe Glu Trp Ala 180 185 190

Lys Asn Ser Pro Leu Asn Lys Ala Glu Val His Glu Ser Tyr Lys His 195 200 205

Leu Lys Ser Leu Gln Ser Lys Leu 210 215

<210> 1124

<211> 218

<212> PRT

<213> Homo sapiens

1127

<400> 1124 Pro Ser Pro Arg Pro Pro Asp Pro Glu Ser Ser Gln Leu Arg Pro Gly . 5 Gly Asp Gly Ala Glu Leu Arg Val Leu Val Asp Met Asp Gly Val Leu 25 20 Ala Asp Phe Glu Ala Gly Leu Leu Arg Gly Phe Arg Arg Phe Pro Glu Glu Pro His Val Pro Leu Glu Gln Arg Arg Gly Phe Leu Ala Arg Glu Gln Tyr Arg Ala Leu Arg Pro Asp Leu Ala Asp Lys Val Ala Ser 70 75 65· · Val Tyr Glu Ala Pro Gly Phe Phe Leu Asp Leu Glu Pro Ile Pro Gly 90 Ala Leu Asp Ala Val Arg Glu Met Asn Asp Leu Pro Asp Thr Gln Val 105 100 Phe Ile Cys Thr Ser Pro Leu Leu Lys Tyr His His Cys Val Gly Glu Lys Tyr Arg Trp Val Glu Gln His Leu Gly Pro Gln Phe Val Glu Arg 135 Ile Ile Leu Thr Arg Asp Lys Thr Val Val Leu Gly Asp Leu Leu Ile 145 150 155 Asp Asp Lys Asp Thr Val Arg Gly Gln Glu Glu Thr Pro Ser Trp Glu 170 His Ile Leu Phe Thr Cys Cys His Asn Arg His Leu Val Leu Pro Pro 185 Thr Arg Arg Leu Leu Ser Trp Ser Asp Asn Trp Arg Glu Ile Leu 200

<210> 1125

210

<211> 87

<212> PRT

<213> Homo sapiens

Asp Ser Lys Arg Gly Ala Ala Gln Arg Glu

215

<400> 1125

1128

Met Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr 25 Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Pro 35 40 45 Phe Phe Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe Phe Phe Phe Ser Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe 75 Thr Ser Pro Ser Leu Lys Gly 85 <210> 1126 <211> 174 <212> PRT <213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (173)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1126

Pro Pro Leu Gly Lys Lys Xaa Glu Leu His Arg Gly Gly Gly Arg Ser 1 5 10 15

Arg Leu Glu Glu Phe Gln Met Arg Ala Arg Pro Arg Pro Arg Pro Leu 20 25 30

Trp Ala Thr Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly 35 40 45

Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys
50 55 60

Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro 65 70 75 80

Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn 85 90 95

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu 100 . 105 110

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val 115 120 125

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp 130 135 140

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val 145 150 155 160

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Xaa Gly 165 170

<210> 1127

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1127

Pro Gln Pro Phe Gln Gly Ser Gly Cys Val Ile Ala Ile Leu Gly Lys
1 5 10 15

Arg Cys Ser Arg Pro Trp Arg Thr Trp Arg Gly Arg Thr Pro Ser Thr 20 25 30

Arg His Ile Cys Ser Trp Cys Thr Met Val Ser Gly Thr Ser Ala Ala 35 40 45

Val Glu Glu Tyr Ser Cys Glu Phe Gly Ser Ala Lys Tyr Tyr Ala Leu 50 55 60

Cys Gly Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val 65 70 75 80

Val Pro Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Lys
85 90 95

Tyr Lys Gly Ile Phe Asn Gly Phe Ser Val Thr Leu Lys Glu Asp Gly 100 105 110

Val Arg Gly Leu Ala Lys Gly Trp Ala Pro Thr Phe Leu Gly Tyr Ser 115 120 125

Met Gln Gly Leu Cys Lys Phe Gly Phe Tyr Glu Val Phe Lys Val Leu

130 135 140 Tyr Ser Asn Met Leu Gly Glu Glu Asn Thr Tyr Leu Trp Arg Thr Ser 145 150 155 Leu Tyr Leu Ala Ala Ser Ala Ser Ala Glu Phe Phe Ala Asp Ile Ala 170 Leu Ala Pro Met Glu Ala Ala Lys Val Arg Ile Gln Thr Gln Pro Gly 180 185 Tyr Ala Asn Thr Leu Arg Asp Ala Ala Pro Lys Met Tyr Lys Glu Glu 200 Gly Leu Lys Ala Phe Tyr Lys Gly Val Ala Pro Leu Trp Met Arg Gln 215 Ile Pro Tyr Thr Met Met Lys Phe Ala Cys Phe Glu Arg Thr Val Glu 225 230 Ala Leu Tyr Lys Phe Val Val Pro Lys Pro Arg Ser Glu Cys Ser Lys 245 250 Pro Glu Gln Leu Val Val Thr Phe Val Ala Gly Tyr Ile Ala Gly Val Phe Cys Ala Ile Val Ser His Pro Ala Asp Ser Val Val Ser Val Leu 275 Asn Lys Glu Lys Gly Ser Ser Ala Ser Leu Val Leu Lys Arg Leu Gly 295 Phe Lys Gly Val Trp Lys Gly Leu Phe Ala Arg Ile Ile Met Ile Gly 310 315 Thr Leu Thr Ala Leu Gln Trp Phe Ile Tyr Asp Ser Val Lys Val Tyr 325 330 Phe Arg Leu Pro Arg Pro Pro Pro Glu Met Pro Glu Ser Leu Lys 345

Lys Lys Leu Gly Leu Thr Gln 355

<210> 1128

<211> 399

<212> PRT

<213> Homo sapiens

PCT/US00/05882

<220> <221> SITE <222> (208) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (349) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1128 Leu Glu Pro Pro Ala Glu Pro Leu Gln Tyr Leu Ala Cys Tyr Arg Phe His Cys Ser His Gln Leu Gly Asp Asn Met Trp Phe Leu Thr Thr Leu 25 Leu Leu Trp Val Pro Val Asp Gly Gln Val Asp Thr Thr Lys Ala Val 40 35 Ile Thr Leu Gln Pro Pro Trp Val Ser Val Phe Gln Glu Glu Thr Val Thr Leu His Cys Glu Val Leu His Leu Pro Gly Ser Ser Ser Thr Gln 70 75 Trp Phe Leu Asn Gly Thr Ala Thr Gln Thr Ser Thr Pro Ser Tyr Arg 85 Ile Thr Ser Ala Ser Val Asn Asp Ser Gly Glu Tyr Arg Cys Gln Arg 105 100 Gly Leu Ser Gly Arg Ser Asp Pro Ile Gln Leu Glu Ile His Arg Gly 120 Trp Leu Leu Gln Val Ser Ser Arg Val Phe Thr Glu Gly Glu Pro 130 135 Leu Ala Leu Arg Cys His Ala Trp Lys Asp Lys Leu Val Tyr Asn Val 155 Leu Tyr Tyr Arg Asn Gly Lys Ala Phe Lys Phe Phe His Trp Asn Ser 170 Asn Leu Thr Ile Leu Lys Thr Asn Ile Ser His Asn Gly Thr Tyr His 180 185 Cys Ser Gly Met Gly Lys His Arg Tyr Thr Ser Ala Gly Ile Ser Xaa 200

Thr Val Lys Glu Leu Phe Pro Ala Pro Val Leu Asn Ala Ser Val Thr

210 215 220 Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys 225 230 235 Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met 250 245 Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile 265 Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln 295 Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe 315 305 310 Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val 325 330 Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Trp Xaa Leu Glu Ile 345 Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu 355 360 Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu 375 Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr 385 390 <210> 1129 <211> 147 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

1133

<400> 1129

Glu Ile Leu Phe Ile Phe Xaa Xaa Phe Phe Lys Gly Leu Ser Asn Ser 1 5 10 15

Ala Ala Ala Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys
20 25 30

Lys Lys Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val 35 40 45

Glu Asp Gly Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu 50 55 60

Arg Ile Lys Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Gly Val Val 65 70 75 80

Thr Ile Glu Arg Ser Lys Ser Lys Ile Thr Val Thr Ser Glu Val Pro 85 90 95

Phe Ser Lys Arg Tyr Leu Lys Tyr Leu Thr Lys Lys Tyr Leu Lys Lys 100 105 110

Asn Asn Leu Arg Asp Trp Leu Arg Val Val Ala Asn Ser Lys Glu Ser 115 . 120 . 125

Tyr Glu Leu Arg Tyr Phe Gln Ile Asn Gln Asp Glu Glu Glu Glu 130 135 140

Asp Glu Asp

<210> 1130

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1130

Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr 1 5 10 15

Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro 20 25 30

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Glu Met 35 40 45

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pr Thr Leu 50 55 60

Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Pro 65 70 75 . 80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr 85 90

<210> 1131

WO 00/55350

<211> 510

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (352)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1131

Thr Ser Glu Glu Ser Arg Pro Arg Leu Ser Gln Leu Ser Val Thr Asp

Val Thr Thr Ser Ser Leu Arg Leu Asn Trp Glu Ala Pro Pro Gly Ala
20 25 30

Phe Asp Ser Phe Leu Leu Arg Phe Gly Val Pro Ser Pro Ser Thr Leu
35 40 45

Glu Pro His Pro Arg Pro Leu Leu Gln Arg Glu Leu Met Val Pro Gly
50 55 60

Thr Arg His Ser Ala Val Leu Arg Asp Leu Arg Ser Gly Thr Leu Tyr
65 70 75 80

Ser Leu Thr Leu Tyr Gly Leu Arg Gly Pro His Lys Ala Asp Ser Ile 85 90 95

Gln Gly Thr Ala Arg Thr Leu Ser Pro Val Leu Glu Ser Pro Arg Asp 100 105 110

Leu Gln Phe Ser Glu Ile Arg Glu Thr Ser Ala Lys Val Asn Trp Met 115 120 125

Pro Pro Pro Ser Arg Ala Asp Ser Phe Lys Val Ser Tyr Gln Leu Ala 130 135 140.

Asp 145	Gly	Gly	Glu	Pro	Gln 150	Ser	Val	Gln	Val	Asp 155	Gly	Gln	Ala	Arg	Th:
Gln	Lys	Leu	Gln	Gly 165	Leu	Ile	Pro	Gly	Ala 170	Arg	Tyr	Glu	Val	Thr 175	Va]
Val	Ser	Val	Arg 180	Gly	Phe	Glu	Glu	Ser 185	Glu	Pro	Leu	Thr	Gly 190	Phe	Let
Thr	Thr	Val 195	Pro	Asp	Gly	Pro	Thr 200	Gln	Leu	Arg	Ala	Leu 205	Asn	Leu	Thr
Glu	Gly 210	•	Ala	Val	Leu	His 215	Trp	Lys	Pro	Pro	Gln 220	Asn	Pro	Val	Asp
Thr 225	Tyr	Asp	Xaa	Gln	Val 230	Thr	Ala	Pro	Gly	Ala 235	Pro	Pro	Leu	Gln	Ala 240
Glu	Thr	Pro	Gly	Ser 245	Ala	Val	Asp	Tyr	Pro 250	Leu	His	Asp	Leu	Val 255	Leu
			260					Arg 265					270		
	-	275					280					285			
	290				•	295		Pro			300				
305					310			Gly		315					320
				325				Leu	330					335	
			340					Ser 345					350		
		355					360	Leu				365			
	370					375		Phe			380				
385					390			Arg		395					400
Gly	Asn	Arg	Glu	Arg 405	Pro	Leu	Asn	Val	Phe 410	Cys	Asp	Met	Glu	Thr 415	Asp

1136

Gly Gly Gly Trp Leu Val Phe Gln Arg Arg Met Asp Gly Gln Thr Asp 420 Phe Trp Arg Asp Trp Glu Asp Tyr Ala His Gly Phe Gly Asn Ile Ser 435 440 445 Gly Glu Phe Trp Leu Gly Asn Glu Ala Leu His Ser Leu Thr Gln Ala 455 Gly Asp Tyr Ser Met Arg Val Asp Leu Arg Ala Gly Asp Glu Ala Val 470 475 Phe Ala Gln Tyr Asp Ser Phe His Val Asp Ser Ala Ala Glu Tyr Tyr 485 490 Arg Leu His Leu Glu Gly Tyr His Gly Thr Ala Gly Thr Pro 505 <210> 1132 <211> 430 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (182) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (408) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (410) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (414) <223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (420) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (428) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1132 Arg Thr Ala Asp Gln Thr Val Thr Ala Ala Leu Thr Lys Arg Ser Trp Asn Ser Ser Ser Pro Gln Arg Arg Thr Glu Gln Thr Ala Glu Thr 25 Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln 40 Arg Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly 70 75 Lys Glu Val Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile 105 Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser 120 Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile 130 135 Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu 170 Pro Lys Pro Ser Ile Xaa Ser Asn Asn Ser Lys Pro Val Glu Asp Lys 180 185 Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr 200 Leu Trp Trp Val Asn Asn Gln Xaa Leu Pro Val Ser Pro Arg Leu Gln

1138

210 215 220 Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn 230 235 Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg 250 245 Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn 280 Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe 295 Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn 305 310 Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser 325 330 Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala 345 Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu 355 360 Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr 375 Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg 390 395 Leu His Leu Pro Met Thr Thr Xaa Pro Xaa Leu Tyr Ser Xaa Ala Gln 405 410 Gly Met Met Xaa Asp Pro Met Asn Val Glu Ser Xaa Thr Asn 425

<210> 1133

<211> 737

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

WO 00/55350

1139

PCT/US00/05882

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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<220>
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<222> (535)
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<400> 1133
Xaa His Ala Ser Ala Ala Xaa Pro Thr Val Thr Ala Ala Leu Thr Arg
Ala Phe Leu Glu Leu Lys Leu Ser Thr Lys Arg Trp Thr Glu Lys Thr
                                 25
             20
Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val
                                                 45
         35
                             40
Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn
Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val
```

80 65 70 <sub>.</sub> 75 Ala Glu Gly Lys Glu Val Leu Leu Leu Ala His Asn Leu Pro Gln Asn 90 85 Arg Ile Gly Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser 105 Leu Ile Val Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro 115 Ala Tyr Ser Gly Arg Glu Thr Ile Tyr Pro Asn Xaa Ser Leu Leu Ile 135 Gln Asn Val Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile 150 155 Lys Ser Asp Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr 170 · 165 Pro Glu Leu Pro Lys Pro Ser Ile Ser Xaa Asn Asn Ser Asn Pro Val 185 Glu Xaa Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Val Gln Asn 200 Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro 215 210 Arg Leu Gln Leu Ser Asn Gly Asn Met Thr Leu Thr Leu Leu Ser Val 225 230 235 Lys Arg Asn Asp Ala Gly Ser Tyr Glu Cys Glu Ile Gln Asn Pro Ala 245 250 Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro 260 265 Asp Gly Pro Thr Ile Ser Pro Ser Lys Ala Asn Tyr Arg Pro Gly Glu Asn Leu Asn Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr 300 295 Ser Trp Phe Xaa Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe 305 310 315 Ile Pro Asn Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala 330 His Asn Ser Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr

345 350 340 Val Tyr Ala Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn 360 Pro Val Glu Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile 375 Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val 395 385 390 Ser Pro Arg Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn 425 Glu Leu Ser Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr 440 435 Gly Pro Asp Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro 455 Gly Val Asn Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala 470 475 Gln Tyr Ser Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu 485 Leu Phe Ile Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys 505 Gln Ala Asn Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr 520 525 Ile Thr Val Ser Ala Xaa Xaa Pro Lys Pro Ser Ile Ser Ser Asn Asn 530 535 Ser Lys Pro Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Ala Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu 570 Pro Val Ser Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr 580 585 Leu Phe Asn Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile 600 Gln Asn Ser Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val

1142

615 610 620 Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr 630 635 Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro 650 Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr 660 Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr 680 Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val 695 700 Lys Ser Ile Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala 710 705 Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu 730 Ile <210> 1134 <211> 71 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids

Gln Ala Leu Ile Glu Pro Gly 65 70

<210> 1135

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1135

Gly Leu Arg Arg Leu Asp Ser Ala Ser Gly Thr Val Tyr Thr Ala Met
1 5 10 15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln 20 25 30

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg
35 40 45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val
50 60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu 65 70 . 75 80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala 85 90 95

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln 100 105 110

Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr
115 120 125

Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val 130 135 140

Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu 145 150 155 160

Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala 165 170 175

Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile 180 185 190

Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg 195 200 205

Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys 210 215 220

Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Lys Glu Ala Thr 225 230 235 240

Lys Asn Asn His

<210> 1136

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1136

Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys 1 5 10 15

Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr 20 25 30

Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala 35 40 45

Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg
50 55 60

Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val 65 70 75 80

Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile 85 90 95

Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser 100 105 110

Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu 115 120 125

Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala 130 135 140

Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr 145 150 155 160

Ala Thr Ser Gly Met Pro 165

<210> 1137

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1137

Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe 1 5 10 15

Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp 20 25 30

Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys 35 40 45

Ile Phe Asn Phe Ile Asn Met Leu Gln Leu Pro Asp Leu Lys Lys
50 55 60

Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe 65 70 75

<210> 1138

<211> 397

<212> PRT

<213> Homo sapiens

<400> 1138

Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val 1 5 10 15

Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu 20 25 30

Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu 35 40 45

Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile 50 55 60

Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro 65 70 75 80

Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr 85 90 95

Thr	Leu	Arg	G1y 100	Arg	Ser	Asp	Ala	105	Leu	Val	vai	Pne	110	ser	PIC
Leu	Thr	Thr 115	Phe	Gln	Asp	Gln	Leu 120	Asn	Arg	Arg	Gly	Glu 125	Phe	Ile	Gln
Glu	Ile 130	Arg	Arg	Gln	Leu	Glu 135	Ala	Cys	Gln	Arg	Glu 140	Arg	Ala	Phe	Ser
Val 145	Lys	Phe	Glu	Val	Gln 150	Ala	Pro	Arg	Trp	Gly 155	Asn	Pro	Arg	Ala	Leu 160
Ser	Phe	Val	Leu	Ser 165	Ser	Leu	Gln	Leu	Gly 170	Glu	Gly	Val	Glu	Phe 175	Asp
Val	Leu	Pro	Ala 180	Phe	Asp	Ala	Leu	Asp 185	Phe	Ala	Arg	Thr	Gly 190	Gln	Leu
		Gly 195					200					205			
	210	Thr				215					220				
225		Gln	-	-	230					235		-			240
		Arg		245	-				250			•		255.	
_	-	Leu	260					265					270		
_		Arg 275	_			_	280					285			
	290	Val				295					300				
305		Lys			310					315					320
		Gln		325					330					335	
		Gly	340					345					350		
Ala	Gln	Glu 355	Ala	Glu	Ala	Trp	Lea 360	Asn	Tyr	Pro	Cys	Phe 365	Lys	Asn	Trp

Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala 370 375 380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala 385 390 395

<210> 1139

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1139

Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr 1 5 10 15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala 20 25 30

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser 35 40 45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu 50 55 60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu 65 70 75 80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg 85 90 95

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys 100 105 110

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala 115 120 125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn 130 135 140

Pro Ser Leu Lys Gln Gln Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala 145 150 155 160

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile 165 170 175

Leu Phe Ala Met 180

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<210> 1140
<211> 484
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1140
Trp Leu Leu Arg Ser Pro Gly Lys Leu Thr Ala Arg Glu Arg Ile Ser
                                      10
Leu Leu Leu Asp Pro Gly Ser Phe Xaa Glu Ser Asp Met Phe Val Glu
His Arq Cys Ala Asp Phe Gly Met Ala Ala Asp Lys Asn Lys Phe Pro
         35
Gly Asp Ser Val Val Thr Gly Arg Gly Arg Ile Asn Gly Arg Leu Val
Tyr Val Phe Ser Gln Asp Phe Thr Val Phe Gly Gly Ser Leu Ser Gly
                     70
                                         75
Ala His Ala Gln Lys Ile Cys Lys Ile Met Asp Gln Ala Ile Thr Val
Gly Ala Pro Val Ile Gly Leu Asn Asp Ser Gly Gly Ala Arg Ile Gln
                                 105
Glu Gly Val Glu Ser Leu Ala Gly Tyr Ala Asp Ile Phe Leu Arg Asn
                            120
Val Thr Ala Ser Gly Val Ile Pro Gln Ile Ser Leu Ile Met Gly Pro
    130
                        135
Cys Ala Gly Gly Ala Val Tyr Ser Pro Ala Leu Thr Asp Phe Thr Phe
145
                    150
                                         155
Met Val Lys Asp Thr Ser Tyr Leu Phe Ile Thr Gly Pro Asp Val Val
                                    170
Lys Ser Val Thr Asn Glu Asp Val Thr Gln Glu Glu Leu Gly Gly Ala
            180
                                185
Lys Thr His Thr Thr Met Ser Gly Val Ala His Arg Ala Phe Glu Asn
                            200
                                                205
        195
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Asp	Val 210		Ala	Leu	Cys	Asn 215	Leu	Arg	Asp	Phe	Phe 220	Asn	Tyr	Leu	Pro
Leu 225	Ser	Ser	Gln	Asp	Pro 230	Ala	Pro	Val	Arg	Glu 235	Cys	His	Asp	Pro	Ser 240
Asp	Arg	Leu	Val	Pro 245	Glu	Leu	Asp	Thr	11e 250	Val	Pro	Leu	Glu	Ser 255	Thr
Lys	Ala	Tyr	Asn 260	Met	Val	Asp	Ile	11e 265	His	Ser	Val	Val	Asp 270	Glu	Arg
Glu	Phe	Phe 275	Glu	Ile	Met	Pro	Asn 280	Tyr	Ala	Lys		Ile 285	Ile	Val	Gly
Phe	Ala 290	Arg	Met	Asn	Gly	Arg 295	Thr	Val	Gly	Ile	Val 300	Gly	Asn	Gln	Pro
305	Val	Ala	Ser	Gly	Cys 310	Leu	Asp	Ile	Asn	Ser 315	Ser	Val	Lys	Gly	Ala 320
Arg	Phe	Val	Arg	Phe 325	Cys	Asp	Ala	Phe	Asn 330	Ile	Pro	Leu	Ile	Thr 335	Phe
Val	Asp	Val	Pro 340	Gly	Phe	Leu	Pro	Gly 345	Thr			Glu		Gly	Gly
Ile	Ile	Arg 355	His	Gly	Ala	Lys	Leu 360	Leu	Tyr	Ala	Phe	Ala 365	Glu	Ala	Thr
Val	Pro 370	Lys	Val	Thr	Val	Ile 375	Thr	Arg	Lys	Ala	Tyr 380	Gİy	Gly	Ala	Tyr
Asp 385	Val	Met	Ser	Ser	Lys 390	His	Leu	Cys	Gly	Asp 395	Thr	Asn	Tyr	Ala	Trp 400
Pro	Thr	Ala	Glu	Ile 405	Ala	Val	Met	Gly	Ala 410	Lys	Gly	Ala	Val	Glu 415	Ile
Ile	Phe	Lys	Gly 420	His	Glu	Asn	Val	Glu 425	Ala	Ala	Gln	Ala	Glu 430	Tyr	Ile
Glu	Lys	Phe 435	Ala	Asn	Pro	Phe	Pro 440	Ala	Ala	Val	Arg	Gly 445	Phe	Val	Asp
Asp	Ile 450	Ile	Gln	Pro <sub>.</sub>	Ser	Ser 455	Thr	Arg	Ala	Arg	Ile 460	Суз	Суз	Asp	Leu
Asp 465	Val	Leu	Ala	Ser	Lys 470	Lys	Val	Gln	Arg	Pro 475	Trp	Arg	Lys	His	Ala 480

Asn Ile Pro Leu

<212> PRT

<400> 1142

<213> Homo sapiens

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<210> 1141
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1141
Leu Xaa Glu Leu Glu Arg Tyr Val Thr Ser Cys Leu Arg Lys Lys Arg
                                     10
Lys Pro Gln Ala Glu Lys Val Asp Val Ile Ala Gly Ser Ser Lys Met
                               25
             20
Lys Gly Phe Ser Ser Ser Glu Ser Glu Ser Ser Ser Glu Ser Ser
                             40
Ser Asp Ser Glu Xaa Xaa Glu Thr Gly Pro Ala
<210> 1142
<211> 199
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Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu Leu Ile Ser Tyr Thr

Ser Gly Tyr Lys Thr Ile Ser Ala Met Gln Thr Ile Lys Cys Val Val

1151

20 25 Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr 40 Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr 65 Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His 105 100 Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg 115 120 Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro 135 Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val 155 Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val 165 Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys 180 185 Ser Arg Arg Cys Val Leu Leu 195 <210> 1143 <211> 171 <212> PRT <213> Homo sapiens <400> 1143 Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu

Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe

Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu

40

20

1152

Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu 55 60 50 Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg 70 75 Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys 90 Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr 100 105 110 Thr Leu Ser Ser Ser Leu Leu Gln Ser Val Glu Glu Pro Met Val His 120 Leu Arg Leu Glu Val Ala Ala Pro Gly Thr Pro Ala Gln Pro Val 135 140 Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu 145 Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly 165

<210> 1144 <211> 151 <212> PRT . <213> Homo sapiens <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1144 Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr 5 10 15

1153

Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly
20 25 30

Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Ala Pro Val 35 40 45

Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Ser His
50 55 60

Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His 65 70 75 80

Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr 85 90 95

Arg Pro Ala Ala Gln Pro Ser Ala Ala Gln Pro Ala Ala Pro Ala 100 105 110

Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys 115 120 125

Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala 130 135 140

Lys Pro Gly Lys Ser Gln Gln 145 150

<210> 1145

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1145

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe
1 5 10 15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile 20 25 30

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr 35 40 45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile 50 55 60

Val Lys Val Lys Lys Glu 65 70

1154

<210> 1146

<211> 166

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1146

Leu His Ala Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Val 1 5 10 15

Leu Leu Gly Met Glu Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys
20 25 30

Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr 35 40 45

Pro Tyr Trp Met Ala Pro Glu Xaa Val Thr Arg Lys Ala Tyr Gly Pro 50 55 60

Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Val Glu 65 70 75 80

Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu 85 90 95

Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser 100 105 110

Pro Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu 115 120 125

Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Pro Phe Leu Lys Leu 130 135 140

Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Met Ala Ala Lys Glu 145 150 155 160

Ala Met Lys Ser Asn Arg 165

<210> 1147

<211> 420

<212> PRT

<213> Homo sapiens

~22	0 –														
<22	1> S	ITE													
<22	2> (2	203)													
<22	3> X	aa e	qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-ai	mino	acio	ds
	0> 1														
Cys	Pro	Pro	Phe	Ser	Val	Arg	<b>V</b> al	Pro	Pro	Trp	Ala	Gly	Leu	Ala	Leu
1				5					10					15	
Leu	Pro	Ser	Pro 20	Ser	Leu	Met	Ala	Leu 25	Leu	Arg	Arg	Pro	Thr 30	Val	Ser
Ser	Asp	Leu 35	Glu	Asn	Ile	Asp	Thr 40	Gly	Val	Asn	Ser	Lys 45	Val	Lys	Ser
His	Val 50	Thr	Ile	Arg	Arg	Thr 55	Val	Leu	Glu	Glu	Ile 60	Gly	Asn	Arg	۷al
Thr 65	Thr	Arg	Ala	Ala	Gln 70	Val	Ala	Lys	Lys	Ala 75	Gln	Asn	Thr	Lys	Va) 80
Pro	Val	Gln	Pro	Thr 85	Lys	Thr	Thr	Asn	Val 90	Asn	Lys	Gln	Leu	Lys 95	Pro
Thr	Ala	Ser -	Val	Lys	Pro	Val	<b>G</b> ln	Met 105	Glu	Lys	Leu	Ala	Pro 110		Gly
Pro	Ser	Pro 115	Thr	Pro	Glu	Asp	<b>V</b> al	Ser	Met	Lys	Glu	Glu 125	Asn	Leu	Сув
Gln	Ala 130	Phe	Ser	Asp	Ala	Leu 135	Leu	Суѕ	Lys	Ile	Glu 140	Asp	Ile	Asp	Asn
Glu 145	Asp	Trp	Glu	Asn	Pro 150	Gln	Leu	Cys	Ser	Asp 155	туг	Val	Lys	Asp	11e
Tyr	Gln	Tyr	Leu	Arg 165	Gln	Leu	<b>Gl</b> u	Val	Leu 170	Gln	Ser	Ile	Asn	Pro 175	His
Phe	Leu	Asp	Gly 180	Arg	Asp	Ile	<b>A</b> sn	Gly 185	Arg	Met	Arg	Ala	11e 190	Leu	Val
Asp	Trp	Leu 195	Val	Gln	Val	His	Ser 200	Lys	Phe	Xaa	Leu	Leu 205	Gln	Glu	Thr
Leu	Tyr 210	Met	Cys	Val	Gly	11e 215	Met	Asp	Arg	Phe	Leu 220	Gln	Val	Gln	Pro
Val 225	Ser	Arg	Lys	Lys	Leu 230	Gln	Leu	Val	Gly	Ile 235	Thr	Ala	Leu	Leu	Leu 240

1156

Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val 245 250 255

Tyr Ile Thr Asp Asn Ala Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu
260 265 270

Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro 275 280 285

Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu 290 295 300

Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr 305 310 315 320

Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ala Ser Cys 325 330 335

Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln 340 345 350

Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His 355 360 365

Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile 370 375 380

Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met 385 390 395 400

Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu 405 410 415

Ile Gly Arg Ser 420

<210> 1148

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (244)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1148

Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr L u

1157

1				5					10					15	
Ser	Ser	Ser	Gln 20	Ser	Arg	Ala	Ser	Val 25	Pro	Thr	Asp	туг	Ser 30	туг	Leu
Pro	Glu	Ser 35	Ser	Phe	Ile	Gly	Ala 40	Ala	Ile	Gly	Phe	Phe 45	Ile	Thr	Gly
Gly	Lys 50	Lys	Gly	Pro	Glu	Ser 55	Val	Pro	Pro	Ser	Leu 60	Leu	Lys	Val	Val
Met 65	Lys	Pro	Ile	Ala	Thr 70	Val	<b>G</b> ly	Glu	Ser	Tyr 75	Gln	Tyr	Pro	Pro	Val 80
Asn	Trp	Ala <sup>.</sup>	Ala	Leu 85	Leu	Ser	Pro	Leu	Met 90	Arg	Leu	Asn	Phe	Gly 95	Glu
Glu	Ile	Gln	Gln 100	Leu	Cys	Leu	Glu	Ile 105	Met	Val	Thr	Gln	Ala 110	Gln	Ser
Ser	Gln	Asn 115	Ala	Ala	Ala	Leu	Leu 120	Gly	Leu	Trp	Val	Thr 125	Pro	Pro	Leu
Ile	His 130	Ser	Leu	Ser	Leu	Asn 135	Thr	Lys	Arg	Tyr	Leu 140	Leu	Ile	Ser	Ala
Pro 145	Leu	Trp	Ile	Lys	His 150	Ile	Ser	Asp	Glu	Gln 155	Ile	Leu	Gly	Phe	Val 160
Glu	Asn		Met	Val 165	Ala	Val	Phe	Lys	Ala 170	Ala	Ser	Pro	Leu	Gly 175	Ser
Pro	Glu	Leu	Cys 180	Pro	Ser	Ala	Leu	His 185	Gly	Leu	Ser	Gln	Ala 190	Met	Lys
Leu	Pro	Ser 195	Pro	Ala	His	His	Leu 200	Trp	Ser	Leu	Leu	Ser 205	Glu	Ala	Thr
Gly	Lys 210	Ile	Phe	Asp	Leu	Leu 215	Pro	Asn	Lys	Ile	Arg 220	Arg	Lys	Asp	Leu
Glu 225	Leu	Tyr	Ile	Ser	Ile 230	Ala	Lys	Cys	Leu	Leu 235	Glu	Met	Thr	Asp	Asp 240
Asp	Ala	Asn	Xaa	Asp 245	Arg	Pro	Gly	Tyr							-

<210> 1149 <211> 239

<212> PRT <213> Homo sapiens

<400> 1149

Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu 20 25 30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu 35 40 45

His Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu
50 55 60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr 65 70 75 80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp 85 90 95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile 100 105 110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys
115 120 -125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly 130 135 140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg 145 150 155 160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val 165 170 175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys 180 185 190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly
195 200 205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser 210 215 220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys Lys 225 230 235

<210> 1150 <211> 394 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1150 Ala Glu Xaa Gly Lys Thr Glu Trp Leu Phe Gly Met Asp Glu Gly Arg Lys Gln Leu Ala Ala Ser Ala Gly Phe Arg Arg Leu Ile Thr Val Ala 25 Leu His Arg Gly Gln Gln Tyr Glu Ser Met Asp His Ile Gln Ala Glu 40 Leu Ser Ala Arg Val Met Glu Leu Ala Pro Ala Gly Met Pro Thr Gln Gln Gln Val Pro Phe Leu Ser Val Gly Gly Asp Ile Gly Val Arg Thr 70 75 Val Gln His Gln Asp Cys Ser Pro Leu Ser Gly Asp Tyr Val Ile Glu Asp Val Gln Gly Asp Asp Lys Arg Tyr Phe Arg Arg Leu Ile Phe Leu 105 Ser Asn Arg Asn Val Val Gln Ser Glu Ala Arg Leu Leu Lys Asp Val 120 Ser His Lys Ala Gln Lys Lys Arg Lys Asp Arg Lys Lys Gln Arg 130 135 Pro Ala Asp Ala Glu Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp Lys Ser Tyr Leu Cys Cys Glu His His Lys Ala Met Ile Ala Gly Leu 170 Ala Leu Leu Arg Asn Pro Glu Leu Leu Glu Ile Pro Leu Ala Leu 185 180 Leu Val Val Gly Leu Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp

200

His Ph Pro Lys Ser Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met

1160

220 210 215 Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met 235 230 Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly 250 Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp 260 265 Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val 280 Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly 295 Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser 315 305 Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg 330 Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu 345 Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu 355 360 Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu 375 380 Ser Asp Met Leu Lys Thr Val Lys Ile Val 390 <210> 1151 <211> 111 <212> PRT <213> Homo sapiens <400> 1151 Val Asn Val Asn Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp 10 Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg 20

Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu

40

35

Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg 50 55 60

Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro 65 70 75 80

Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys 85 90 95

<210> 1152

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1152

Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser
1 5 10 15

Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys
20 25 30

Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp 35 40 45

Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala 50 55 60

Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val 65 70 75 80

Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg 85 90 95

Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala 100 105 110

Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu 115 120 125

Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile 130 135 140

Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu 145 150 155 160

1162

Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser 165 170

<210> 1153

<211> 197

<212> PRT

<213> Homo sapiens

<400> 1153

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Glu Leu 1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln
20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn 50 55 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp
65 70 75 80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile 100 105 110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu 115 120 125

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu 130 135 140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile 145 150 155 160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp 165 170 175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro 180 185 190

Val His Glu Thr Thr

<210> 1154 <211> 156 <212> PRT <213> Homo sapiens <400> 1154 10 · 25 Ser Ser Ser Ser Asp Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu 40 Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg 75 65 70 90 85 105 Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Ala Lys 115 120 Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro 135 Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln 145 150

<210> 1155

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

1164

<222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the maturally occurring L-amino acids <400> 1155 · Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His 35 Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys 70 75 Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro 85 90 Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg 115 120 <210> 1156 <211> 202 <212> PRT <213> Homo sapiens

<400> 1156

Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln
1 5 10 15

Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser 20 25 30

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala 35 40 45

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

1165

50 55 60 Val Ser Ser Thr His Arg Val Ser Asp Pro Lys Phe His Pro Leu His 75 70 Ser Lys Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser 100 105 Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met 120 Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg 135 Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys 145 Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val 165 Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu 185 Asp Val His Cys Tyr Ser Met Gln Ser Lys 195 200 <210> 1157 <211> 269 <212> PRT <213> Homo sapiens <400> 1157 Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met 40

Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly

Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu

75

70

50

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile 85 90 95

Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu
100 105 110

Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp 115 120 125

Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val 130 135 140

Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser 145 150 155 160

His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys 165 170 175

Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln 180 185 190

Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn 195 200 205

Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr 210 215 220

Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp 225 230 230 235

Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys 245 250 255

Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser 260 265

<210> 1158

<211> 639

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

	2> ( 3> X		qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1						-1			<b>-</b>	•	<b>01</b>	<b>.</b>	3	<b>63.</b>
Met 1	Asp	Glu	Met	Ala 5	Thr	Thr	GIN	11e	10	гàг	Asp	GIU	Leu	15	GIL
Leu	Lys	Glu	Ala 20	Phe	Ala	Lys	Val	Asp 25	Leu	Asn	Ser	Asn	Gly 30	Phe	Ile
Cys	Asp	Tyr 35	Glu	Leu	His	Glu	Leu 40	Phe	Lys	Glu	Ala	Asn 45	Met	Pro	Leu
Pro	Gly 50	Tyr	Lys	Val	Arg	Glu 55	Ile	Ile	Gln	Lys	Leu 60	Met	Leu	Asp	Gly
Asp 65	Arg	Asn	Lys	Asp	Gly 70	Lys	Ile	Ser	Phe	Asp 75	Glu	Phe	Val	Tyr	11€ 80
Phe	Gln	Glu	Val	Lys 85	Ser	Ser	Asp	Ile	.Ala 90	Lys	Thr	Phe	Arg	Lys 95	Ala
Ile	Asn	Arg	Lys 100	Glu	Gly	Ile	Cys	Ala 105	Leu	Gly	Gly	Thr	Ser 110	Glu	Leu
Ser	Ser	Glu 115	Gly	Thr	Gln	His	Ser 120	Tyr	Ser	Glu	Glu	Glu 125	Lys	Tyr	Ala
Xaa	Val 130	Asn	Trp	Ile	Asn	Lys 135	Ala	Leu	Glu	Asn	Asp 140	Pro	Asp	Cys	Arg
His 145	Val	Ile	Pro	Met	Xaa 150	Pro	Asn	Thr	Asp	Asp 155	Leu	Phe	Lys	Ala	Val
Gly	Asp	Gly	Ile	Val 165	Leu	Суз	Lys	Met	Ile 170	Asn	Leu	Ser	Val	Pro 175	Asp
Thr	Ile	Asp	Glu 180	Arg	Ala	Ile	Asn			Lys	Leu	Thr	Pro 190	Phe	Ile
Ile	Gln	Glu 195	Asn	Leu	Asn	Leu	Ala 200	Leu	Asn	Ser	Ala	Ser 205	Ala	Ile	Gly
Суз	His 210	Val	Val	Asn	Ile	Gly 215	Ala	Glu	Asp	Leu	Arg 220	Ala	Gly	Lys	Pro
His 225	Leu	Val	Leu	Gly	Leu 230	Leu	Trp	Gln	Ile	Ile 235	Lys	Ile	Gly	Leu	Phe 240
Ala	Asp	Ile	Glu	Leu 245	Ser	Arg	Asn	Glu	Ala 250	Leu	Ala	Ala	Leu	Leu 255	Arg

	017	014	260	200	014	020	202	265	-,-				270		
Leu	Leu	Arg 275	Trp	Ala	Asn	Phe	His 280	Leu	Glu	Asn	Ser	Gly 285	Trp	Gln	Lys
Ile	Asn 290	Asn	Phe	Ser	Ala	Asp 295	Ile	Lys	Leu	Ile	Asp 300	Phe	Ser	Asn	Ser
Val 305	Lys	Asp	Ser	Lys	Ala 310	Tyr	Phe	His	. Leu	Leu 315	Asn	Gln	Ile	Ala	Pro 320
Lys	Gly	Gln	Lys	Glu 325	Gly	Glu	Pro	Arg	11e 330	Asp	Ile	Asn	Met	Ser 335	Gly
Phe	Asn	Gĺu	Thr 340	Asp	Asp	Leu	Lys	Arg 345	Ala	Glu	Ser	Met	Leu 350	Gln	Gln
Ala	Asp	Lys 355	Leu	Gly	Cys	Arg	Gln 360	Phe	Val	Thr	Pro	Ala 365	Asp	Val	Val
Ser	Gly 370	Asn	Pro	Lys	Leu	Asn 375	Leu	Ala	Phe	Val	Ala 380	Asn	Leu	Phe	Asn
385		-	-		390					395			Asp		400
				405					410				Asn	415	
			420					425					Ala 430		
Gln	Asp	Ala 435	Leu	Val	Ile	Leu	Gln 440	Leu	Tyr	Glu	Arg	Ile 445	Lys	Val	Pro
Val	Asp 450	Trp	Ser	Lys	Val	Asn 455	Lys	Pro	Pro	Tyr	Pro 460	Lys	Leu	Gly	Ala
Asn 465	Met	Lys	Lys	Leu	Glu 470	Asn	Суз	Asn	Tyr	Ala 475	Val	Glu	Leu	Gly	Lys 480
				485					490				Asp	495	
	_		500					505					Leu 510		
Arg	Tyr	Thr 515	Leu	Asn	Val	Leu	Glu 520	Asp	Leu	Gly	Asp	Gly 525	Gln	Lys	Ala

1169

Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala 530 540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser 545 550 555 560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile 565 570 575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His 580 585 590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg 595 600 605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val 610 615 620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val 625 630 635

<210> 1159

<211> 63

<212> PRT-

<213> Homo sapiens

<400> -1159

Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu

1 5 10 15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu 20 25 30

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro 35 40 45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu 50 55 60

<210> 1160

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1160

Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro

1170

15 1 5 10 Lys Gln Pro Thr Asn Pro Tyr Ala Ser Ser Lys Ala Ala Ala Glu Cys 25 20 Phe Val Gln Ser Tyr Trp Glu Gln Tyr Lys Phe Pro Val Val Ile Thr 40 Arg Ser Ser Asn Val Tyr Gly Pro His Gln Tyr Pro Glu Lys Val Ile 50 55 Pro Lys Phe Ile Ser Leu Leu Gln His Asn Arg Lys Cys Cys Ile His 70 Gly Ser Gly Leu Gln Thr Arg Asn Phe Leu Tyr Ala Thr Asp Val Val 90 Glu Ala Phe Leu Thr Val Leu Lys Lys Gly Lys Pro Gly Glu Ile Tyr 100 105 Asn Ile Gly Thr Asn Phe Glu Met Ser Val Val Gln Leu Ala Lys Glu Leu Ile Gln Leu Ile Lys Glu Thr Asn Ser Glu Ser Glu Met Glu Asn 135 Trp Val Asp Tyr Val Asn Asp Arg Pro Thr Asn Asp Met Arg Tyr Pro 145 150 Met Lys Ser Glu Lys Ile His Gly Leu Gly Trp Arg Pro Lys Val Pro 165 170 Trp Lys Glu Gly Ile Lys Lys Thr Ile Glu Trp Tyr Arg Glu Asn Phe 185 His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu Pro Phe Pro Val 195 200 205

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<210> 1161
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<220>

<sup>&</sup>lt;211> 848

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> SITE

<sup>&</sup>lt;222> (815)

<sup>&</sup>lt;223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (844) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1161 Ala Leu Gly Leu Gly Val Thr Met Ala Thr Glu Glu Phe Ile Ile Arg 10 Ile Pro Pro Tyr His Tyr Ile His Val Leu Asp Gln Asn Ser Asn Val Ser Arg Val Glu Val Gly Pro Lys Thr Tyr Ile Arg Gln Asp Asn Glu Arg Val Leu Phe Ala Pro Met Arg Met Val Thr Val Pro Pro Arg His 55 Tyr Cys Thr Val Ala Asn Pro Val Ser Arg Asp Ala Gln Gly Leu Val Leu Phe Asp Val Thr Gly Gln Val Arg Leu Arg His Ala Asp Leu Glu Ile Arg Leu Ala Gln Asp Pro Phe Pro Leu Tyr Pro Gly Glu Val Leu 100 105 Glu Lys Asp Ile Thr Pro Leu Gln Val Val Leu Pro Asn Thr Ala Leu His Leu Lys Ala Leu Leu Asp Phe Glu Asp Lys Asp Gly Asp Lys Val 135 Val Ala Gly Asp Glu Trp Leu Phe Glu Gly Pro Gly Thr Tyr Ile Pro 150 155 Arg Lys Glu Val Glu Val Glu Ile Ile Gln Ala Thr Ile Ile Arg 170 165 Gln Asn Gln Ala Leu Arg Leu Arg Ala Arg Lys Glu Cys Trp Asp Arg 185 Asp Gly Lys Glu Arg Val Thr Gly Glu Glu Trp Leu Val Thr Thr Val 205 Gly Ala Tyr Leu Pro Ala Val Phe Glu Glu Val Leu Asp Leu Val Asp 210 215 Ala Val Ile Leu Thr Glu Lys Thr Ala Leu His Leu Arg Ala Arg Arg 230 235 Asn Phe Arg Asp Phe Arg Gly Val Ser Arg Arg Thr Gly Glu Glu Trp

245 250 255 Leu Val Thr Val Gln Asp Thr Glu Ala His Val Pro Asp Val His Glu 260 265 Glu Val Leu Gly Val Val Pro Ile Thr Thr Leu Gly Pro His Asn Tyr 280 Cys Val Ile Leu Asp Pro Val Gly Pro Asp Gly Lys Asn Gln Leu Gly 295 290 Gln Lys Arg Val Val Lys Gly Glu Lys Ser Phe Phe Leu Gln Pro Gly 310 315 Glu Gln Leu Glu Gln Gly Ile Gln Asp Val Tyr Val Leu Ser Glu Gln 330 Gln Gly Leu Leu Arg Ala Leu Gln Pro Leu Glu Glu Gly Glu Asp 340 345 Glu Glu Lys Val Ser His Gln Ala Gly Asp His Trp Leu Ile Arg Gly Pro Leu Glu Tyr Val Pro Ser Ala Lys Val Glu Val Val Glu Glu Arg 375 370 Gln Ala Ile Pro Leu Asp Glu Asn Glu Gly Ile Tyr Val Gln Asp Val 395 385 390 Lys Thr Gly Lys Val Arg Ala Val Ile Gly Ser Thr Tyr Met Leu Thr 410 Gln Asp Glu Val Leu Trp Glu Lys Glu Leu Pro Pro Gly Val Glu Glu 420 425 430 Leu Leu Asn Lys Gly Gln Asp Pro Leu Ala Asp Arg Gly Glu Lys Asp 435 Thr Ala Lys Ser Leu Gln Pro Leu Ala Pro Arg Asn Lys Thr Arg Val 455 Val Ser Tyr Arg Val Pro His Asn Ala Ala Val Gln Val Tyr Asp Tyr 475 465 470 Arg Glu Lys Arg Ala Arg. Val Val Phe Gly Pro Glu Leu Val Ser Leu Gly Pro Glu Glu Gln Phe Thr Val Leu Ser Leu Ser Ala Gly Arg Pro Lys Arg Pro His Ala Arg Arg Ala Leu Cys Leu Leu Gly Pro Asp

WO 00/55350

1173

525 520 515 Phe Phe Thr Asp Val Ile Thr Ile Glu Thr Ala Asp His Ala Arg Leu 535 Gln Leu Gln Leu Ala Tyr Asn Trp His Phe Glu Val Asn Asp Arg Lys 550 555 Asp Pro Gln Glu Thr Ala Lys Leu Phe Ser Val Pro Asp Phe Val Gly 570 Asp Ala Cys Lys Ala Ile Ala Ser Arg Val Arg Gly Ala Val Ala Ser 585 Val Thr Phe Asp Asp Phe His Lys Asn Ser Ala Arg Ile Ile Arg Thr 600 Ala Val Phe Gly Phe Glu Thr Ser Glu Ala Lys Gly Pro Asp Gly Met 610 615 Ala Leu Pro Arg Pro Arg Asp Gln Ala Val Phe Pro Gln Asn Gly Leu 630 635 Val Val Ser Ser Val Asp Val Gln Ser Val Glu Pro Val Asp Gln Arg 650 Thr Arg Asp Ala Leu Gln Arg Ser Val Gln Leu Ala Ile Glu Ile Thr 660 Thr Asn Ser Gln Glu Ala Ala Ala Lys His Glu Ala Gln Arg Leu Glu 680 Gln Glu Ala Arg Gly Arg Leu Glu Arg Gln Lys Ile Leu Asp Gln Ser 695 Glu Ala Glu Lys Ala Arg Lys Glu Leu Glu Leu Glu Ala Leu Ser 705 710 715 Met Ala Val Glu Ser Thr Gly Thr Ala Lys Ala Glu Ala Glu Ser Arg Ala Glu Ala Ala Arg Ile Glu Gly Glu Gly Ser Val Leu Gln Ala Lys 745 Leu Lys Ala Gln Ala Leu Ala Ile Glu Thr Glu Ala Glu Leu Gln Arg 755 760 Val Gln Lys Val Arg Glu Leu Glu Leu Val Tyr Ala Arg Ala Gln Leu 775 Glu Leu Glu Val Ser Lys Ala Gln Gln Leu Ala Glu Val Glu Val Lys

1174

785 790 795 800

Lys Phe Lys Gln Met Thr Glu Ala Ile Gly Pro Ser Thr Ile Xaa Asp 805 810 815

Leu Ala Val Ala Gly Pro Glu Met Gln Val Lys Leu Leu Gln Ser Leu 820 825 830

Gly Leu Lys Ser Thr Leu Ile Thr Asp Gly Phe Xaa Ser Ile Asn Phe 835 840 845

<210> 1162

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE

~221~ 5116

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1162

Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
1 5 10 15

Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val 20 25 30

Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser 35 40 45

Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr
50 55

<210> 1163

<211> 565

<212> PRT

<213> Homo sapiens

	U - 1														
Ile 1	Pro	Gly	Ser	Thr 5	His	Ala	Ser	Ala	Gly 10	Asn	Leu	Asp	Ser	Pro 15	Glu
Gly	Gly	Phe	Asp 20	Ala	Ile	Met	Gln	Val 25	Ala	Val	Суѕ	Gly	Ser 30	Leu	Ile
Gly	Trp	Arg 35	Asn	Val	Thr	Arg	Leu 40	Leu	Val	Phe	Ser	Thr 45	Asp	Ala	Gl
Phe	His 50	Phe	Ala	Gly	Asp	Gly 55	Lys	Leu	Gly	Gly	Ile 60	Val	Leu	Pro	Asr
65					70				Met	75					80
				85					Val 90					95	
			100					105	Glu				110		
		115					120		Ser			125			
	130	•	-			135			Ile		140				
145					150				Gly	155		•	•		160
				165					Asn 170					175	
			180					185	Ser				190		
		195					2 <b>0</b> 0		Cys			205			
	210					215			Thr		220				
225					230				Gln	235					240
				245					Thr 250					255	
Arg	Cys	Asn	Glu	Gly	Arg	Val	Gly	Arg	His	Суз	Glu	Cys	Ser	Thr	Asp

GIU	val	275		GIU	Asp	Met	280		ТУГ	Cys	ALG	285		ASII	sei
Ser	Glu 290		Cys	Ser	Asn	Asn 295	_	Glu	Cys	Val	Cys 300	-	Gln	Cys	Va]
Cys 305	-	Lys	Arg	Asp	Asn 310	Thr	Asn	Glu	Ile	315		Gly	Lys	Phe	Cys 320
Glu	Cys	Asp	Asn	Phe 325	Asn	Cys	Asp	Arg	Ser 330		Gly	Leu	Ile	Cys 335	_
Gly	Asn	Gly	Val 340	Cys	Lys	Cys	Arg	Val 345	_	Glu	Cys	Asn	Pro 350		туг
Thr	Gly	Ser 355	Ala	Cys	Asp	Cys	Ser 360	Leu	Asp	Thr	Ser	Thr 365		Glu	Ala
Ser	Asn 370	Gly	Gln	Ile	Суз	Asn 375	Gly	Arg	Gly	Ile	Cys 380		Cys	Gly	Val
385	_	•		•	Pro 390	_		-	-	395					400
Gln	Thr	Cys	Leu	Gly 405	Val	Cys	Ala	Glu	His 410	Lys	Glu	Cys	Val	Gln 415	Суя
Arg	Ala	Phe	Asn 420	Lys	Gly	Glu	Lys	Lys 425	Asp	Thr	Суѕ	Thr	Gln 430	Glu	Cya
Ser	Tyr	Phe 435	Asn	Ile	Thr	Lys	Val 440	Glu	Ser	Arg	Asp	Lys 445	Leu	Pro	Gln
Pro	Val 450	Gln	Pro	Asp	Pro	Val 455	Ser	His	Суз	Lys	Glu 460	Lys	Asp	Val	Asp
465	_	_		_	Phe 470					475	-	·			480
				485	Glu -				490					495	
			500		Gly			505		•			510		
		515			Trp		520					525	_		
3lu	Phe 530	Ala	Lys	Phe	Glu	Lys 535	Glu	Lys	Met	Asn	Ala 540	Lys	Trp	Asp	Thr

1177

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro 545 550 555 560

Lys Tyr Glu Gly Lys 565

<210> 1164

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1164

Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser 1 5 10 15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser 20 25 30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln
35 40 45

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser 50 55 60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met
65 70 75 80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro 85 90 95

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu 100 105 110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly
115 120 125

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile 130 135

<210> 1165

<211> 407

<212> PRT

<213> Homo sapiens

<400> 1165

Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala

1				5					10	1				15	
Asp	Arg	Ala	Ala 20		Pro	Leu	Ser	Pro 25		Gln	Ala	. Pro	Ile 30	Trp	Ala
Pro	Ala	Thr 35	Ser	Met	Asp	Ala	Arg 40	Arg	Val	Pro	Gln	Lys 45	-	Leu	Arg
Val	Lys 50	Lys	Asn	Leu	Lys	Lys 55		Arg	Tyr	Val	Lys 60		Ile	Ser	Met
Glu 65	Thr	Ser	Ser	Ser	Ser 70		Asp	Ser	Суз	Asp 75		Phe	Ala	Ser	Asp 08
Asn	Phe	Ala	Asn	Thr 85	Arg	Leu	Gln	Ser	Val 90		Glu	Gly	Cys	Arg 95	Thr
Arg	Ser	Gln	Cys 100	Arg	His	Ser	Gly	Pro 105	Leu	Arg	Val	Ala	Met 110	Lys	Phe
Pro	Ala	Arg 115	Ser	Thr	Arg	Gly	Ala 120	Thr	Asn	Lys	Lys	Ala 125	Glu	Ser	Arg
Gln	Pro 130	Ser	Glu	Asn	Ser	Val 135	Thr	Asp	Ser	Asn	Ser 140	Asp	Ser	Glu	Asp
Glu 145	Ser	Gly	Met	Asn	Phe 150	Leu	Glu	Lys	Arg	Ala 155	Leu	Asn	Ile	Lys	Gln 160
Asn	Lys	Ala	Met	Leu 165	Ala	Lys	Leu	Met	Ser 170	Glu	Leu	Glu	Ser	Phe 175	Pro
Gly	Ser	Phe	Arg 180	Gly.	Arg	His	Pro	Leu 185	Pro	Gly	Ser	Asp	Ser 190	Gln	Ser
Arg	Arg	Pro 195	Arg	Arg	Arg	Thr	Phe 2 <b>0</b> 0	Pro	Gly	Val	Ala	Ser 205	Arg	Arg	Asn
Pro	Glu 210	Arg	Arg	Ala	Arg	Pro 215	Leu	Thr	Arg	Ser	Arg 220	Ser	Arg	Ile	Leu
Gly 225	Ser	Leu	Asp	Ala	Leu 230	Pro	Met	Glu	Glu	Glu 235	Glu	Glu	Glu	Asp	Lys 240
Tyr	Met	Leu	Val	Arg 245	Lys	Arg	Lys	Thr	Val 250	Asp	Gly	Tyr	Met	Asn 255	Glu
Asp	Asp	Leu	Pro 260	Arg	Ser	Arg	Arg	Ser 265	Arg	Ser	Ser	Val	Thr 270	Leu	Pro
His	Ile	Ile	Ara	Pro	Val	Glu	Glp	Ile	Thr	Glu	Glu	Glu	Leu	Glu	Asn

1179

275 280 285 Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser 300 295 Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys 310 Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys 330 325 Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro 345 Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala 370 375 Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys 385 390 395 Gln Glu Phe Glu Met Gln Ala 405 <210> 1166 <211> 240 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (197) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (201)

<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE

<222> (219)

<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mıno	acı	ds
<40	0> 1	166													
Pro 1	Asp	Gly	Arg	Pro 5	Thr	Gly	Asp	Ala	Phe 10	Val	Leu	Phe	Ala	Cys 15	Glu
Glu	Tyr	Ala	Gln 20	Asn	Ala	Leu	Arg	Lys 25	His	Lys	Asp	Leu	Leu 30	Gly	Lys
Arg	Tyr	Ile 35	Glu	Leu	Phe	Arg	Ser 40	Thr	Ala	Ala	Glu	Val 45	Gln	Gln	Val
Leu	Asn 50	-	Phe	Ser	Ser	Ala 55	Pro	Leu	Ile	Pro	Leu 60	Pro	Thr	Pro	Pro
Ile 65	Ile	Pro	Val	Leu	Pro 70	Gln	Gln	Phe	Val	Pro 75	Pro	Thr	Asn	Val	Arg 80
Asp	Cys	Ile	Arg	Leu 85	Arg	Gly	Leu	Pro	Tyr 90	Ala	Ala	Thr	Ile	Glu 95	Asp
Ile	Leu	Asp	Phe 100	Leu	Gly	Glu	Phe	Ala 105	Thr	Asp	Ile	Arg	Thr 110	His	Gly
Val	His	Met 115	Val	Leu	Asn	His	Gln 120	Gly	Arg	Pro	Ser	Gly 125	Asp	Ala	Phe
Ile	Gln 130	Met	Lys	Ser	Ala	Asp 135	Arg	Ala	Phe	Met	Ala 140	Ala	Gln	Lys	Суз
His 145	Tàs	Lys	Asn	Met	Lys 150	Asp	Arg	Tyr	Val	Glu 155	Val	Phe	Gln	Суз	Ser 160
Ala	Glu	Glu	Met	Asn 165	Phe	Val	Leu	Met	Gly 170	Gly	Thr	Leu	Asn	Arg 175	Asn
Gly	Leu	Ser	Pro 180	Pro	Pro	Cys	Leu	Ser 185	Pro	Pro	Ser	Tyr	Thr 190	Phe	Pro
Ala	Pro	Ala 195	Ala	Xaa	Ile	Pro	Thr 200	Xaa	Xaa	Ala	Ile	Туг 205	Gln	Pro	Ser
/al	11e 210	Leu	Asn	Pro	Arg	Ala 215	Leu	Gln	Pro	Xaa	Thr 220	Ala	Tyr	туг	Pro
Ala 225	Gly	Thr	Gln		Phe 230	Met	Asn	Tyr	Thr	Ala 235	Tyr	Tyr	Pro	Ser	Val 240

1181

<210> 1167 <211> 106

<212> PRT

<213> Homo sapiens

<400> 1167

Gly Gly Tyr Ser Val Asp Ser Pro Thr Leu Thr Arg Phe Phe Thr Phe 1 5 10 15

His Phe Ile Leu Pro Phe Ile Ile Ala Ala Leu Ala Ala Leu His Leu 20 25 30

Leu Phe Leu His Glu Thr Gly Ser Asn Asn Pro Leu Gly Ile Thr Ser

His Ser Asp Lys Ile Thr Phe His Pro Tyr Tyr Thr Ile Lys Asp Ala 50 55 60

Leu Gly Leu Leu Leu Phe Leu Leu Ser Leu Met Thr Leu Thr Leu Phe 65 70 75 80

Ser Pro Asp Leu Leu Gly Asp Pro Asp Asn Tyr Thr Leu Ala Asn Pro 85 90 95

Leu Asn Thr Pro Pro His Ile Lys Pro Glu 100 105

<210> 1168

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1168

Gln His Val Gln Arg Glu Trp Ser Gly His Gly Glu Asp Arg Gly Asp 1 5 10 15

Gly Glu Asp Ala Glu Arg Gly Ser Cys Arg Glu Glu Pro Ala His Gly
20 25 30

Val Glu Gly Ala Gly Asp Gly Ala Ala Ala Gly Pro Gly Gly Gly 35 40 45

WO 00/55350

Ala Ala Glu Ala Xaa Gln Val Glu Arg Arg Leu Gln Ser Glu Ser Ala 50 55 60

Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met Arg Glu Lys Gln 65 70 75 80

Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu 85 90 95

Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly His Gly Val Asp 100 105 110

Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu 115 120 125

Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys Arg Trp Phe Val 130 135 140

Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu 145 150 155 160

Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile Glu Gly Ser Val 165 170 175

Leu Arg Pro Pro Ala Pro Val Gln Pro Arg Arg Gly Phe Ser Ala Ser 180 185 190

Thr Met Val Thr Glu Lys Pro Glu Pro Ser Pro His Leu Leu Arg Lys 195 200 205

Asp Pro 210

<210> 1169

<211> 181

<212> PRT

<213> Homo sapiens

<400> 1169

Thr Ser Lys Met Arg Ser Leu Glu Thr Leu Gly Arg Pro Lys Pro Glu
1 5 10 15

Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro 20 25 30

His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe 35 40 45

His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu

1183

50 55 60 Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val 70 75 Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Glu Ala Lys Trp 85 Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile 105 100 Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys 120 115 Ala Ala Asn Pro Ser Gly Lys Lys Leu Lys Ile Phe Gln Pro Val 135 Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His 145 150 Val Ala His Pro Thr Arg Cys Thr Ala Val Met Thr Val Ser Ser Asn 165 170 Thr Pro Gln Arg Gln 180 <210> 1170 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids

Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser

1184

Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala 20 25 30

Pro Phe Gln Leu Ser Asn His  $\operatorname{Thr}$  Gly Arg Ile Lys Val Val Phe  $\operatorname{Thr}$  35 40 45

Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser 50 55 60

Cys Glu Lys Gly Asn Thr Thr Thr Leu Ile Ser Glu Asn Gly His Ala 65 70 75 80

Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu

85 90 95

Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys
100 105 110

Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala 115 120 125

Ser Val Xaa Lys Leu Tyr Gln His Ser Gln Gln Pro Gly Lys Ala Leu 130 135 140

Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr
145 150 160 -

Ser Gln Gln Glu Ser Lys 165

<210> 1171

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1171

Asp Leu Ser Val Asn Phe Trp Glu Pro Asn Gly Phe Gly His Asp Phe 1 5 10 15

Pro Ala His Tyr Ile Leu Thr Gln Asn Phe Phe Arg Met Ala Phe Thr 20 25 30

Ser Thr Pro Glu Ile

1185

<211> 169 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (115) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (163) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (167) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1172 Arg Gly Ala Met Val Ser Cys Arg Pro Gly Cys Cys Cys Pro Trp Thr Pro Ala Val Leu Arg Xaa Ser Val Arg Gly Thr Phe Tyr Ser Pro Pro 20 Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu Val Ala Gly 40 Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg Gln Gly Lys 50 55 Glu Ala Thr Ala Val Xaa Asp Gln Ile Leu Ala Gln Glu Glu Asn Trp 70 75 65

Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu

1186

85 90 95 Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys 105 Pro Ala Xaa Xaa Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met 120 Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val 135 130 Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Arg Gly Cys Gly 155 Arg Arg Xaa Leu Pro Gln Xaa Thr Ser 165 <210> 1173 <211> 180 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1173 Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu Val Pro Phe His Gly Lys 5 10 Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys Pro Ala Glu Leu Val Tyr 20 25 Gln Glu Val Ile Leu Gln Pro Glu Arg Met Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly Ala Ala Gly Gly Val Val Ser Pro Arg 70 65 Asp Phe Val Asn Val Arg Arg Ile Glu Arg Arg Arg Asp Arg Tyr Leu

Ser Ser Gly Ile Ala Thr Ser His Ser Ala Lys Pro Pro Thr His Lys
100 105 110

1187

Tyr Val Arg Gly Glu Asn Gly Pro Gly Gly Phe Ile Val Leu Lys Ser 115 120 125

Ala Ser Asn Pro Arg Val Cys Thr Phe Val Trp Ile Leu Asn Thr Asp 130 135 140

Leu Lys Gly Arg Leu Pro Arg Tyr Leu Ile His Gln Ser Leu Ala Ala 145 · 150 155 160

Thr Met Phe Glu Phe Ala Phe His Leu Arg Xaa Arg Ile Ser Glu Leu 165 170 175

Gly Ala Arg Ala 180

<210> 1174

<211> 436

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (426)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1174

Arg His Gln Arg Arg Arg Ser Val Trp Arg Ser Arg Gly Xaa Cys Cys
1 10 15

Arg Cys Cys Cys Thr Asn Arg Arg Ser Pro Gln Pro Cys Ala Ser Ser 20 25 30

Leu Pro Pro Arg Thr Gly Glu Lys Gln Pro Arg Asn Phe Met Asn Lys
35 40 45

His Gln Lys Pro Val Leu Thr Gly Gln Arg Phe Lys Thr Arg Lys Arg 50 55 60

Asp Glu Lys Glu Lys Phe Glu Pro Thr Val Phe Arg Asp Thr Leu Val 65 70 75 80

Gln Gly Leu Asn Glu Ala Gly Asp Asp Leu Glu Ala Val Ala Lys Phe
85 90 95

Leu	Asp		· 100	_	ser	Arg	Leu	105	_	Arg	Arg	туг	110		THE
Leu	Phe	Asp 115		Leu	Val	Ala	Gly 120		Met	Leu	Ala	Pro 125		Gly	Thr
Arg	Ile 130	_	Asp	Gly	Asp	Lys 135		Lys	Met	Thr	Asn 140		Cys	Val	Phe
Ser 145		Asn	Glu	Asp	His 150	Glu	Thr	Ile	Arg	Asn 155	Tyr	Ala	Gln	Val	Phe 160
Asn	Lys	Leu	Ile	Arg 165	Arg	Tyr	Lys	Tyr	Leu 170		Lys	Ala	Phe	Glu 175	
Glu	Met	Lys	Lys 180	Leu	Leu	Leu	Phe	Leu 185	Lys	Ala	Phe	Ser	Glu 190	Thr	Glu
Gln	Thr	Lys 195		Ala	Met	Leu	Ser 200	Gly	Ile	Leu	Leu	Gly 205	Asn	Gly	Thr
	210					215					Asp 220				
Glu 225	Gly	Ile	Ala	Ala	Ser 230	Phe	Ala	Val	Lys	Leu 235	Phe	Lys	Ala	Trp	Met 240
Ala	Glu	Lys	Asp	Ala 245	Asn	Ser	Val	Thr	Ser 250	Ser	Leu	Arg	Lys	Ala 255	Asn
			260					265			Asn		270		
		275					280				Leu	285			
_	290		_			295					Arg 300				
305					310					315	Pro				320
				325					330		Asp			335	
			340			-		345			Asn		350		
Asn	Lys	Lys 355	Glu	Glu	Leu	Val	Ala 360	Glu	Gln	Ala	Leu	Lys 365	His	Leu	Lys

1189

Gln Tyr Ala Pro Leu Leu Ala Val Phe Ser Ser Gln Gly Gln Ser Glu 370 375 380

Leu Ile Leu Leu Gln Lys Val Gln Glu Tyr Cys Tyr Asp Asn Ile His 385 390 395 400

Phe Met Lys Ala Phe Gln Lys Ile Val Leu Pro Tyr Thr Ile Ser Val 405 410 415

Leu Leu Leu Arg Ser Glu His Gln Leu Xaa Ser Cys Arg Phe Gly Thr 420 425 430

Ser Gly Thr Ser 435

<210> 1175

<211> 366

<212> PRT

<213> Homo sapiens

<400> 1175

Thr Glu Pro Val Gly Tyr Thr Lys Ala Glu Glu Pro Ile Ala Met Arg
1 5 10 15

Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala Val Ser 20 25 30

Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln Glu Asn 35 40 45

Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala Ile Gly 50 55 60

Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr Val Ser 65 70 75 80

Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser Met Thr 85 90 95

Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly Ala Tyr 100 105 110

Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser Lys Trp 115 120 125

Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp Glu Tyr 130 135 140

Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro Thr Ile

1190

160 145 150 155 Thr Ala Lys Leu Tyr Gly Arg Ala Pro Gln Leu Arg Glu Thr Leu Leu 170 165 Gln Asp Phe Arg Val Val Ala Gln Gly Val Gly Ile Pro Glu Asp Ser 185 Ile Phe Thr Met Ala Asp Arg Gly Glu Cys Val Pro Gly Glu Gln Glu 205 195 200 Pro Glu Pro Ile Leu Ile Pro Arg Val Arg Arg Ala Val Leu Pro Gln 215 Glu Glu Glu Gly Ser Gly Gly Gln Leu Val Thr Glu Val Thr Lys 230 235 Lys Glu Asp Ser Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys Met Gly 250 245 Met Thr Ser Arg Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys Glu Thr 260 265 Phe Gln Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Val Thr Glu Lys Glu Cys Leu Gln Thr Cys Arg Thr Val Ala Ala Cys Asn Leu Pro 290 295 Ile Val Arg Gly Pro Cys Arg Ala Phe Ile Gln Leu Trp Ala Phe Asp 305 315 310 Ala Val Lys Gly Lys Cys Val Leu Phe Pro Tyr Gly Gly Cys Gln Gly 325 330 Asn Gly Asn Lys Phe Tyr Ser Glu Lys Glu Cys Arg Glu Tyr Cys Gly 340 Val Pro Gly Asp Gly Asp Glu Glu Leu Leu Arg Phe Ser Asn 360 355

<210> 1176

<211> 133

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

1191

<223> Xaa equals any of the maturally occurring L-amino acids <220> <221> SITE <222> (120) <223> Xaa equals any of the maturally occurring L-amino acids <220> <221> SITE <222> (126) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1176 Met Pro Arg Ser Ser His His Pro Pro Arg Arg His Tyr His His His 10 His Tyr His Gln Pro Pro Pro Ser Pro Cys Pro Ser Pro Pro Leu Thr 25 Ser Pro Ser Pro Leu Ser Trp Ile Leu Trp Thr Cys Trp Pro Ser Thr 45 35 40 Ala Ala Thr Arg Pro Gly Arg Arg Lys Trp Gly Cys Arg Leu Cys Pro Arg His Ser Ser Pro Leu Leu Leu His Leu Asn Leu Leu Ala Trp 75 Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly Asp Arg Lys Gln Lys 85 90 95 Lys Arg Asp Gln Asn Lys Ser Ala Xaa Leu Arg Tyr Arg Gln Arg Lys 100 105 Gly Ala Gly Gly Val Glu Gly Xaa Gly Lys Gly Lys Leu Xaa Gly Gly Trp Glu Gly Lys Gly 130 <210> 1177 <211> 583 <212> PRT <213> Homo sapiens <400> 1177 Thr Ala Gln Arg Pro Arg Ser Pro Glu Asn Cys Arg Pro Ser Thr Met 10

Trp	Leu	Arg	Ala 20	Phe	Ile	Leu	Ala	Thr 25	Leu	Ser	Ala	Ser	Ala 30	Ala	Trp
Ala	Gly	His 35	Pro	Ser	Ser	Pro	Pro 40	Val	Val	Asp	Thr	Val 45	His	Gly	Lys
Val	Leu 50	Gly	Lys	Phe	Val	Ser 55	Leu	Glu	Gly	Phe	Ala 60	Gln	Pro	Val	Ala
11e 65	Phe	Leu	Gly	Ile	Pro 70	Phe	Ala	Lys	Pro	Pro 75	Leu	Gly	Pro	Leu	Arg 80
				85					90	Ser	••			95	
			100					105		Pro		•	110		
		115					120			Asn		125			
	130					135				Thr	140				
145	-				150					11e 155					160
		-		165					170	Leu		•		175	
			180					185		Arg			190		
		195					200			Gly Asp		205			
_	210					215	_			Gly	220				
225					230					235 Leu					240
				245					250	Leu				255	
			260					265		Gln			270		
-, <b>-</b>	-, 5	275	P		_, ,		280					285		<b></b>	

PCT/US00/05882

Gly	Cys 290	Lys	Thr	Thr	Thr	Ser 295	Ala	Val	Met	Val	His 300	Cys	Leu	Arg	Gln
Lys 305	Thr	Glu	Glu	Glu	Leu 310	Leu	<b>G</b> lu	Thr	Thr	Leu 315	Lys	Met	Lys	Phe	Leu 320
Ser	Leu	Asp	Leu	Gln 325	Gly	Asp	Pro	Arg	Glu 330	Ser	Gln	Pro	Leu	Leu 335	Gly
Thr	Val	Ile	Asp 340	Gly	Met	Leu	Leu	Leu 345	Lys	Thr	Pro	Glu	Glu 350	Leu	Gln
Ala	Glu	Arg 355	Asn	Phe	His	Thr	<b>V</b> al <b>36</b> 0	Pro	Tyr	Met	Val	Gly 365	Ile	Asn	Lys
Gln	Glu 370	Phe	Gly	Trp	Leu	Ile 375	Pro	Met	Gln	Leu	Met 380	Ser	туr	Pro	Leu
Ser 385	Glu	Gly	Gln	Leu	Asp 390	Gln	Lys	Thr	Ala	Met 395	Ser	Leu	Leu	Trp	Lys 400
Ser	Tyr	Pro	Leu	Val 405	Cys	Ile	Ala	_	Glu 410	Leu	Ile	Pro	Glu	Ala 415	Thr
Glu	Lys	Tyr	Leu 420	Gly	Gly	Thr	Asp	Asp 425	Thr	Val	Lys	Lys	Lys 430	Asp	Leu
Phe	Leu	Asp 435	Leu	Ile	Ala	Asp	Val 440	Met	Phe	Gly	Val	Pro 445	Ser	Val	Ile
Val	Ala 450	Arg	Asn	His	Arg	Asp 455	Ala	Gly	Ala	Pro	Thr 460	Tyr	Met	Tyr	Glu
Phe 465	Gln	Tyr	Arg	Pro	Ser 470	Phe	Ser	Ser	Asp	Met 475	Lys	Pro	Lys	Thr	Val 480
Ile	Gly	Asp	His	Gly 485	Asp	Glu	Leu	Phe	ser 490	Val	Phe	Gly	Ala	Pro 495	Phe
Leu	Lys	Glu	Gly 500	Ala	Ser	Glu	<b>Gl</b> u	Glu 505	Ile	Arg	Leu	Ser	Lys 510	Met	Val
Met	Lys	Phe 515	Trp	Ala	Asn	Phe	Ala 520	Arg	Asn	Gly	Asn	Pro 525	Asn	Gly	Glu
Gly	Leu 530	Pro	His	Trp	Pro	Glu 535	Tyr	Asn	Gln	Lys	Glu 540	Gly	Tyr	Leu	Gln
Ile 545	Gly	Ala	Asn	Thr	Gln 550	Ala	Ala	Gln	Lys	L u 555	Lys	Asp	Lys	Glu	Val 560

1194

Ala Phe Trp Thr Asn Leu Phe Ala Lys Lys Ala Val Glu Lys Pro Pro 565 570 575

Gln Thr Glu His Ile Glu Leu 580

<210> 1178

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITÉ

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178

Pro Gly Arg Xaa Gln Leu Arg Ala Lys Phe Ser Cys Pro Pro Ala Asp 1 5 10 15

Arg Val Asn Val Thr Val Arg Pro Gly Leu Ala Met Ala Leu Ser Gly 20 25 30

Ser Thr Glu Pro Cys Ala Gln Leu Ser Ile Ser Ser Ile Gly Val Val
35 - 40 - 45

Gly Thr Ala Glu Asp Asn Arg Ser His Ser Ala His Phe Phe Glu Phe 50 55 60

Leu Thr Lys Glu Leu Ala Leu Gly Gln Asp Arg Ile Leu Ile Arg Phe 65 70 75 80

Phe Pro Leu Glu Ser Trp Gln Ile Gly Lys Ile Gly Thr Val Met Thr 85 90 95

Phe Leu

<210> 1179

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (67) <223> Xaa equals any of the maturally occurring L-amino acids <400> 1179 Phe Arg Pro Ala Val Ser Xaa Gly Ser Leu Cys Leu Pro Ala Arg Thr Ala His Ser Pro Ala Ser Ser Ala Ala Cys Arg Thr Met Ala Gln Gly Gln Arg Lys Phe Gln Ala His Lys Pro Ala Lys Ser Lys Thr Ala Ala Ala Xaa Ser Glu Lys Asn Arg Gly Pro Arg Lys Gly Gly Arg Val Ile 55 Ala Pro Xaa Lys Ala Arg Val Val Gln Gln Lys Leu Lys Lys Asn 70 75 65 70 /5 out Leu Glu Val Gly Ile Arg Lys Lys Ile Glu His Asp Val Val Met Lys Ala Ser Ser Leu Pro Lys Lys Leu Ala Leu Leu Lys Ala Pro Ala 100 105 Lys Lys Lys Gly Ala Ala Ala Thr Ser Ser Lys Thr Pro Ser 115 <210> 1180 <211> 94 <212> PRT <213> Homo sapiens Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro

Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala

Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser

1196

40 45 35 Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu 55 Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr 70 Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu His Ser 85 <210> 1181 <211> 353 <212> PRT <213> Homo sapiens <400> 1181 Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser 5 Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly 40 Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala 50 Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys Ala Val Pro Arg Glu Glu Leu Phe Val Thr Ser Lys Leu Trp Asn Thr 100 Lys His His Pro Glu Asp Val Glu Pro Ala Leu Arg Lys Thr Leu Ala 120 Asp Leu Gln Leu Glu Tyr Leu Asp Leu Tyr Leu Met His Trp Pro Tyr 135

Ala Phe Glu Arg Gly Asp Asn Pro Phe Pro Lys Asn Ala Asp Gly Thr

Ile Cys Tyr Asp Ser Thr His Tyr Lys Glu Thr Trp Lys Ala Leu Glu

170

150

165

1197

Ala Leu Val Ala Lys Gly Leu Val Gln Ala Leu Gly Leu Ser Asn Phe 180 Asn Ser Arg Gln Ile Asp Asp Ile Leu Ser Val Ala Ser Val Arg Pro 200 195 Ala Val Leu Gln Val Glu Cys His Pro Tyr Leu Ala Gln Asn Glu Leu 215 Ile Ala His Cys Gln Ala Arg Gly Leu Glu Val Thr Ala Tyr Ser Pro 230 235 Leu Gly Ser Ser Asp Arg Ala Trp Arg Asp Pro Asp Glu Pro Val Leu Leu Glu Glu Pro Val Val Leu Ala Leu Ala Glu Lys Tyr Gly Arg Ser 265 Pro Ala Gln Ile Leu Leu Arg Trp Gln Val Gln Arg Lys Val Ile Cys 275 280 285 Ile Pro Lys Ser Ile Thr Pro Ser Arg Ile Leu Gln Asn Ile Lys Val 295 Phe Asp Phe Thr Phe Ser Pro Glu Glu Met Lys Gln Leu Asn Ala Leu 310 315 Asn Lys Asn Trp Arg Tyr Ile Val Pro Met Leu Thr Val Asp Gly Lys 325 Arg Val Pro Arg Asp Ala Gly His Pro Leu Tyr Pro Phe Asn Asp Pro 345

Tyr

<210> 1182

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1182

Ala Arg Asp Ser Leu Gln Leu Ser Met Ala Gln Thr Ser Ser Tyr Phe 1 5 10 15

Met Leu Ile Ser Cys Leu Met Phe Leu Ser Gln Ser Gln Gly Gln Glu
20 25 30

Ala Gln Thr Glu Leu Pro Gln Ala Arg Ile Ser Cys Pro Glu Gly Thr Asp Asp Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr Go Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr Go Cys Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr Go Cys Cys Gln Asn Met Asn Ser Gly Asn Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu Ser Val Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile 90

Lys Glu Ser Gly Thr Asp Asp Phe Asn Val Trp Ile Gly Leu His Asp 105

Pro Lys Lys Asn Arg Arg Trp His Trp Ser Ser Gly Ser Leu Val Ser 115 120 125

Tyr Lys Ser Trp Gly Ile Gly Ala Pro Ser Ser Val Asn Pro Gly Tyr 130 135 140

Cys Val Ser Leu Thr Ser Ser Thr Gly Phe Gln Lys Trp Lys Asp Val 145 150 155 160

Pro Cys Glu Asp Lys Phe Ser Phe Val Cys Lys Phe Lys Asn 165 170

<210> 1183

<211> 342

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (171)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (187)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

WO 00/55350

<22	•	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	1> S 2> (	308)							•		<b>.</b>	•		:	 س
			qual	s an	y or	tne	nat	uraı	TÀ O	ccur	ring	L-a	mīno	acı	as
	0> l Ile		Ser	Tyr 5	Ile	Arg	Leu	Glu	Leu 10		Ser	Met	Trp	Leu 15	Le
Val	Ser	Val	Ile 20	Leu	Ile	Ser	Arg	Ile 25	Ser	Ser	Val	Gly	Gly 30	Glu	Ala
Thr	Phe	Cys 35	Asp	Phe	Pro	Lys	Ile 40	Asn	His	Gly	Ile	Leu 45	туr	Asp	Glu
Glu	Lys 50	Tyr	Lys	Pro	Phe	Ser 55	Gln	Val	Pro	Thr	Gly 60	Glu	Val	Phe	Ty
Tyr 65	Ser	Cys	Glu	Tyr	Asn 70	Phe	Val	Ser	Pro	Ser 75	Lys	Ser	Phe	Trp	Thi 80
Arg	Ile	Thr	Cys	Thr 85	Glu	Glu	Gly	Trp	Ser 90	Pro	Thr	Pro	Lys	Суз 95	Let
Arg	Leu	Суз	Phe 100	Phe	Pro	Phe	Val	Glu 105	Asn	Gly	His	Ser	G1u 110	Ser	Sei
Gly		Thr 115	His	Leu	Glu	Gly	Asp 120	Thr	Val	Gln	Ile	Ile 125	Cys	Asn	Thi
Gly	Tyr 130	Arg	Leu	Gln	Asn	Asn 135	Glu	Asn	Asn	Ile	Ser 140	Cys	Val	Glu	Arg
Gly 145	Trp	Ser	Thr	Pro	Pro 150	Lys	Cys	Arg	Ser	Thr 155	Asp	Thr	Ser	Cys	Va]
Asn	Pro	Pro	Thr	Val 165	Gln	Asn	Ala	Xaa	Ile 170	Xaa	Ser	Arg	Gln	Met 175	Ser
Lys	Tyr	Pro	Ser 180	Gly	Glu	Arg	Val	Arg 185	Tyr	Xaa	Cys	Arg	Ser 190	Pro	Туг
Glu	Met	Phe 195	Gly	Asp	Glu	Glu	Val 200	Met	Суз	Leu	Asn	Gly 205	Asn	Trp	Thr
Glu	Pro 210	Pro	Gln	Cys	Lys	Asp 215	Ser	Thr	Gly	Lys	Cys 220	Gly	Pro	Pro	Pro

1200

Pro Ile Asp Asn Gly Asp Ile Thr Ser Phe Pro Leu Ser Val Tyr Ala 225 230 235 Pro Ala Ser Ser Val Glu Tyr Gln Cys Gln Asn Leu Tyr Gln Leu Glu 250 Gly Asn Lys Arg Ile Thr Cys Arg Asn Gly Gln Trp Ser Glu Pro Pro 260 265 Lys Cys Leu His Pro Cys Val Ile Ser Arg Glu Ile Met Glu Asn Tyr 280 Asn Ile Ala Leu Arg Trp Thr Ala Lys Gln Lys Leu Tyr Xaa Arg Thr 295 Gly Glu Ser Xaa Glu Phe Val Cys Lys Arg Gly Tyr Arg Leu Ser Ser 310 315 Arg Ser His Thr Leu Arg Thr Thr Cys Trp Asp Gly Lys Leu Glu Tyr 330 325 Pro Thr Cys Ala Lys Arg 340 <210> 1184 <211> 198 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids

40

1201

Gln Lys Ala Arg Glu Glu Glu Glu Glu Lys Glu Gly Asp Gly Ala 50 55 60

Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser 65 70 75 80

Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly
85 90 95

Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys
100 105 110

Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu
115 120 125

Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met 130 135 140

His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu 145 150 155 160

Xaa Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu 165 170 175

Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln 180 185 190

Ser Leu Ser Leu Asn Lys 195

<210> 1185

<211> 210

<212> PRT

<213> Homo sapiens

<400> 1185

Ala His Ala Ser Ala His Ala Ser Gly Met Asp Leu Ser Leu Leu Trp

1 10 15

Val Leu Leu Pro Leu Val Thr Met Ala Trp Gly Gln Tyr Gly Asp Tyr
20 25 30

Gly Tyr Pro Tyr Gln Gln Tyr His Asp Tyr Ser Asp Asp Gly Trp Val
35 40 45

Asn Leu Asn Arg Gln Gly Phe Ser Tyr Gln Cys Pro Gln Gly Gln Val

Ile Val Ala Val Arg Ser Ile Phe Ser Lys Lys Glu Gly Ser Asp Arg

1202

70 75 65 Gln Trp Asn Tyr Ala Cys Met Pro Thr Pro Gln Ser Leu Gly Glu Pro 85 90 Thr Glu Cys Trp Trp Glu Glu Ile Asn Arg Ala Gly Met Glu Trp Tyr 105 Gln Thr Cys Ser Asn Asn Gly Leu Val Ala Gly Phe Gln Ser Arg Tyr 115 120 Phe Glu Ser Val Leu Asp Arg Glu Trp Gln Phe Tyr Cys Cys Arg Tyr 135 Ser Lys Arg Cys Pro Tyr Ser Cys Trp Leu Thr Thr Glu Tyr Pro Gly 150 155 His Tyr Gly Glu Glu Met Asp Met Ile Ser Tyr Asn Tyr Asp Tyr Tyr 165 Ile Arg Gly Ala Thr Thr Phe Ser Ala Val Glu Arg Asp Arg Gln 185 Trp Lys Phe Ile Met Cys Arg Met Thr Glu Tyr Asp Cys Glu Phe Ala 200 Asn Val 210 <210> 1186 <211> 141 <212> PRT <213> Homo sapiens <400> 1186 Arg Ala Ile Tyr Phe Leu Arg Val His Arg Leu Trp Ser Ser Ile Ser 5 Leu Leu Phe Phe Pro Ser Ala Lys Met Ala Leu Glu Thr Val Pro Lys Asp Leu Arg His Leu Arg Ala Cys Leu Leu Cys Ser Leu Val Lys Thr 40 Ile Asp Gln Phe Glu Tyr Asp Gly Cys Asp Asn Cys Asp Ala Tyr Leu 50 Gln Met Lys Gly Asn Arg Glu Met Val Tyr Asp Cys Thr Ser Ser Ser

75

70

1203

Phe Asp Gly Ile Ile Ala Met Met Ser Pro Glu Asp Ser Trp Val Ser 85 90 95

Lys Trp Gln Arg Val Ser Asn Phe Lys Pro Gly Val Tyr Ala Val Ser

Val Thr Gly Arg Leu Pro Gln Gly Ile Val Arg Glu Leu Lys Ser Arg 115 120 125

Gly Val Ala Tyr Lys Ser Arg Asp Thr Ala Ile Lys Thr 130 135 140

<210> 1187

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1187

Leu Leu Gly Ser Cys Leu Gln Glu Ala Met Thr Leu Asn Ser Glu Pro

1 5 10 15

Tyr Ser Val Leu Thr Ser Gly Ser His Val Phe Leu Cys Gln Val Ile 20 25 30

Lys Tyr Leu Val Leu Val Phe Cys Leu Xaa Pro Lys Leu Pro Leu Trp 35 40 45

Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr
50 55 60

Lys Xaa Gly Phe Ser Lys Gly Leu Gly Xaa Asp Ser 65 70 75

<211> 516 <212> PRT <213> Homo sapiens <400> 1188 Ile Arg Ile Ala Ala Leu Asp Asp Phe Arg Thr Ser Leu Thr Met Ser 5 10 Ser Thr Arg Ser Gln Asn Pro His Gly Leu Lys Gln Ile Gly Leu Asp Gln Ile Trp Asp Asp Leu Arg Ala Gly Ile Gln Gln Val Tyr Thr Arg Gln Ser Met Ala Lys Ser Arg Tyr Met Glu Leu Tyr Thr His Val Tyr 55 Asn Tyr Cys Thr Ser Val His Gln Ser Asn Gln Ala Arg Gly Ala Gly Val Pro Pro Ser Lys Ser Lys Gly Gln Thr Pro Gly Gly Ala Gln 90 Phe Val Gly Leu Glu Leu Tyr Lys Arg Leu Lys Glu Phe Leu Lys Asn 100 105 Tyr Leu Thr Asn Leu Leu Lys Asp Gly Glu Asp Leu Met Asp Glu Ser Val Leu Lys Phe Tyr Thr Gln Gln Trp Glu Asp Tyr Arg Phe Ser Ser 135 Lys Val Leu Asn Gly Ile Cys Ala Tyr Leu Asn Arg His Trp Val Arg 145 150 Arg Glu Cys Asp Glu Gly Arg Lys Gly Ile Tyr Glu Ile Tyr Ser Leu 165 170 Ala Leu Val Thr Trp Arg Asp Cys Leu Phe Arg Pro Leu Asn Lys Gln 185 Val Thr Asn Ala Val Leu Lys Leu Ile Glu Lys Glu Arg Asn Gly Glu 195 Thr Ile Asn Thr Arg Leu Ile Ser Gly Val Val Gln Ser Tyr Val Glu 210 215 220 Leu Gly Leu Asn Glu Asp Asp Ala Phe Ala Lys Gly Pro Thr Leu Thr

<210> 1188

225	•				230					235					240
Val	Tyr	Lys	Glu	Ser 245	Phe	Glu	Ser	Gln	Phe 250		Ala	Asp	Thr	Glu 255	
Phe	Tyr	Thr	Arg 260		Ser	Thr	Glu	Phe 265		Gln	Gln	Asn	270		Thi
Glu	Tyr	Met 275		Lys	Ala	Glu	<b>A</b> la 280		Leu	Leu	Glu	Glu 285		Arg	Arg
Val	Gln 290		Tyr	Leu	His	Glu 295		Thr	Gln	Asp	Glu 300		Ala	Arg	Lys
Cys 305		Gln	Val	Leu	1le 310	Glu	Lys	His	Leu	Glu 315		Phe	His	Thr	G1u 320
Phe	Gln	Asn	Leu	Leu 325	Asp	Ala	Asp	Lys	Asn 330		Asp	Leu	Gly	Arg 335	Met
туг	Asn	Leu	Val 340		Arg	Ile	Gln	Asp 345		Leu	Gly	Glu	Leu 350		Lys
Leu	Leu	Glu 355		His	Ile	His	<b>A</b> sn <b>36</b> 0	Gln	Gly	Leu	Ala	Ala 365		Glu	Lys
Cys	Gly 370		Ala	Ala	Leu	Asn 375	Asp	Pro	Lys	Met	Туг 380	Val	Gln	Thr	Val
Leu 385	Asp	Val	His	Lys	Lys 390	Tyr	Asn	Ala	Leu	Val 395	Met	Ser	Ala	Phe	Asn 400
Asn	Asp	Ala	Gly	Phe 405	.Val	Ala	Ala	Leu	Asp 410	Lys	Ala	Cys	Gly	Arg 415	Phe
Ile	Asn	Asn	Asn 420	Ala	Val	Thr	Lys	Met 425	Ala	Gln	Ser	Ser	Ser 430	Lys	Ser
Pro	Glu	Leu 435	Leu	Ala	Arg	Tyr	<b>Cys</b> 440	Asp	Ser	Leu	Leu	Lys 445	Lys	Ser	Ser
Lys	Asn 450	Pro	Glu	Glu	Ala	Glu 455	Leu	Glu	Asp	Thr	Leu 460	Asn	Gln	Val	Met
Val 465	Val	Phe	Lys	Tyr	Ile 470	Glu	Asp	Lys	Asp	Val 475	Phe	Gln	Lys	Phe	Tyr 480
Ala	Lys	Met	Leu	Ala 485	Lys	Arg	Leu	Val	His 490	Gln	Asn	Ser	Ala	Ser 495	Asp
Acn	A12	Glu	Ala	Ser	Mot	Tle	Sar	T.ve	T.eu	T.ve	Glr	Ala	Cvs	Glv	Phe

1206

500 505 510 Glu Tyr Thr Ser 515 <210> 1189 <211> 287 <212> PRT <213> Homo sapiens <220> <221> SITE ··· <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (254) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (274) <223> Xaa equals any of the naturally occurring L-amino acids

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Trp Val Ala Asp Leu Ala Phe Pro Thr Thr Leu Leu Gly Gln Phe Leu 210 215 220

Glu Asp Met Glu Ala Tyr Ala Glu Asp Leu Ser His Val Ala Ser Gly 225 230 235 240

Glu Ser Val Asp Glu Asp Val Pro Pro Pro Ser Val Ser Xaa Pro Lys 245 250 255

Leu Ala Ala Leu Leu Arg Val Phe Ser Thr Val Val Arg Ser Xaa Gly 260 265 270

Glu Xaa Xaa Ser Pro Ile Arg Xaa Leu Gln Leu Leu Arg His Thr 275 280 285

<210> ·1190

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1190

Arg Pro Pro Ser Arg Trp Ser Trp Trp Gln Gly Lys Pro Thr Gly Gly
1 5 10 15

Val Cys Val Ala Ala Ala Arg Ser Ser Pro Ser Val Thr Ala Pro Thr 20 25 30

Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg 35 40 45

Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg 50 55 60

Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp
65 70 75 80

Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu 85 90 95

Ala Pro Gly Leu 100

<210> 1191

<211> 115

<212> PRT

<213> Homo sapiens

1209

<400> 1191 Asn Asp Val Ile His Gln Tyr Val Tyr Met Tyr Phe Tyr Ile Asp Leu 5 Glu Asn Thr Ala Lys Thr Phe Met Thr Ser Cys Ile Thr Ala Phe Val 20 Tyr Ile Phe Leu Thr Val Ile Ile Pro Thr Gly Thr Leu Thr Val Ala Leu Leu Asn Val Gln Asn Leu Tyr Phe Arg Asn Asn Lys Lys Asp Thr Tyr Met Phe Pro Lys Gln Trp Cys Gly Glu Cys Val Arg Lys Thr 75 70 Asn Leu Ile Gly Ser Thr Asn Thr Lys Cys Ile Thr Asn Ala Pro Val 90 His Val Phe Val Leu Lys Arg Val Asn Glu Asp Leu Tyr Ile Ser Ile 100 105 Asn Asp Ile 115 <210> 1192 <211> 415 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1192 Arg Ile Pro Pro Glu Ser Leu Ala Arg Glu Xaa Arg Xaa Thr Lys Ser 10 Phe Ser Asn Pro Arg Pro Asp Arg Gly Thr Trp Ser Leu Ser Glu

Lys Phe Asn Leu Arg Asp Lys Met Gln Trp Thr Ser Leu Leu Leu Leu

40

20

Ala	Gly 50	Leu	Phe	Ser	Leu	Ser 55	Gln	Ala	Gln	Tyr	Glu 60	Asp	Asp	Pro	His
Trp 65	Trp	Phe	His	туг	Leu 70	Arg	Ser	Gln	Gln	Ser 75	Thr	Tyr	Tyr	Asp	Pro 80
Tyr	Asp	Pro	Tyr	Pro 85	Tyr	Glu	Thr	туr	Glu 90	Pro	Tyr	Pro	Tyr	Gly 95	Val
Asp	Glu	Gly	Pro 100	Ala	Tyr	Thr	Tyr	Gly 105	Ser	Pro	Ser	Pro	Pro 110	Asp	Pro
Arg	Asp	Cys 115	Pro	Gln	Glu	Cys	Asp 120	Cys	Pro	Pro	Asn	Phe 125		Thr	Ala
Met	Tyr 130	Cys	Asp	Asn	Arg	Asn 135	Leu	Lys	Tyr	Leu	Pro 140	Phe	Val	Pro	Ser
Arg 145	Met	Lys	Tyr	Val	Tyr 150	Phe	Gln	Asn	Asn	Gln 155	Ile	Thr	Ser	Ile	Gln 160
Glu	Gly	Val	Phe	Asp 165	Asn	Ala	Thr	Gly	Leu 170	Leu	Trp	Ile	Ala	Leu 175	His
Gly	Asn	Gln	Ile 180	Thr	Ser	Asp		Val 185	Gly	Arg	Lys	Val	Phe 190	Ser	Lys
Leu	Arg	His 195	Leu	Glu	Arg	Leu	Tyr 200	Leu	Asp	His	Asn	Asn 205	Leu	Thr	Arg
Met	Pro 210	Gly	Pro	Leu	Pro	Arg 215	Ser	Leu	Arg	Glu	Leu 220	His	Leu	Asp	His
Asn 225	Gln	Ile	Ser	Arg	Val 230	Pro	Asn	Asn	Ala	Leu 235	Glu	Gly	Leu	Glu	Asn 240
Leu	Thr	Ala	Leu	Tyr 245	Leu	Gln	His	Asn	Glu 250	Ile	Gln	Glu	Val	Gly 255	Ser
Ser	Met	Arg	Gly 260	Leu	Arg	Ser	Leu	11e 265	Leu	Leu	Asp	Leu	Ser 270	Tyr	Asn
His	Leu	Arg 275	Lys	Val	Pro	Asp	Gly 280	Leu	Pro	Ser	Ala	Leu 285	Glu	Gln	Leu
Tyr	Met 290	Glu	His	Asn	Asn	Val 295	Tyr	Thr	Val	Pro	Asp 300	Ser	Tyr	Phe	Arg
Gly 305	Ala	Pro	Lys	Leu	Leu 310	Tyr	Val	Arg	Leu	Ser 315	His	Asn	Ser	Leu	Thr 320

1211

Asn Asn Gly Leu Ala Ser Asn Thr Phe Asn Ser Ser Ser Leu Leu Glu 325 Leu Asp Leu Ser Tyr Asn Gln Leu Gln Lys Ile Pro Pro Val Asn Thr 345 340 Asn Leu Glu Asn Leu Tyr Leu Gln Gly Asn Arg Ile Asn Glu Phe Ser 360 Ile Ser Ser Phe Cys Thr Val Val Asp Val Val Asn Phe Ser Lys Leu 375 380 Gln Val Leu Arg Leu Asp Gly Asn Glu Ile Lys Arg Ser Ala Met Pro 390 Ala Asp Ala Pro Leu Cys Leu Arg Leu Ala Ser Leu Ile Glu Ile 405 410 <210> 1193 <211> 620 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (375) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (501) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (532) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (546) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1193 Ser Ala Val Thr Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp

Ser Glu Phe Ser Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val

WO 00/55350

1212

PCT/US00/05882

			20					25					30		
Met	Ala	Glu 35	Glu	Arg	Val	Val	Met 40	Leu	Pro	Pro	Arg	Ala 45	Arg	Ser	Leu
Lys	Ser 50		Val	Val	Thr	Ser 55	Val	Val	Ala	Phe	Pro 60	Thr	Asp	Ser	Lys
Thr 65	Val	Gln	Arg	Thr	Gln 70	Asp	Asn	Ser	Cys	Ser 75	Phe	Gly	Leu	His	Ala 80
Arg	Gly	Val	Glu	Leu 85	Met	Arg	Phe	Thr	Thr 90	Pro	Gly	Phe	Pro	Asp 95	Ser
Pro	Tyr	Pro	Ala 100	His	Ala	Arg	Cys	Gln 105	Trp	Ala	Leu	Arg	Gly 110	Asp	
Asp	Ser	Val 115	Leu	Ser	Leu	Thr	Phe 120	Arg	Ser	Phe	Asp	Leu 125	Ala	Ser	Суз
Asp	Glu 130	Arg	Gly	Ser	Asp	Leu 135	.Val	Thr	Val	Tyr	Asn 140	Thr	Leu	Ser	Pro
Met 145	Glu	Pro	His	Ala	Leu 150	Val	Gln	Leu	Cys	Gly 155	Thr	Tyr	Pro	Pro	Ser 160
Tyr	Asn	Leu	Thr	Phe 165	His	Ser	Ser	Gln	Asn 170	Val	Leu	Leu	Ile	Thr 175	Leu
Ile	Thr	Asn	Thr 180	Glu	Arg	Arg	His	Pro 185	Gly	Phe	Glu	Ala	Thr 190	Phe	Phe
Gln	Leu	Pro 195	Arg	Met	Ser	Ser	C <b>y</b> s 2 <b>0</b> 0	Gly	Gly	Arg	Leu	Arg 205	Lys	Ala	Gln
Gly	Thr 210	Phe	Asn	Ser	Pro	Туг 215	Tyr	Pro	Gly	His	Tyr 220	Pro	Pro	Asn	Ile
Asp 225	Cys	Thr	Trp	Asn	11e 230	Glu	Val	Pro	Asn	Asn 235	Gln	His	Val	Lys	Val 240
Arg	Phe	Lys	Phe	Phe 245	Tyr	Leu	Leu	Glu	Pro 250	Gly	Val	Pro	Ala	Gly 255	Thr
Суз	Pro	Lys	Asp 260	Tyr	Val	Glu	Ile	Asn 265	Gly	Glu	Lys	Tyr	Cys 270	Gly	Glu
Arg	Ser	Gln 275	Phe	Val	Val	Thr	Ser 280	Asn	Ser	Asn	Lys	Ile 285	Thr	Val	Arg
Phe	His	Ser	Asp	Gln	Ser	Tyr	Thr	Asp	Thr	Gly	Phe	Leu	Ala	Glu	Tyr

300 290 295 Leu Ser Tyr Asp Ser Ser Asp Pro Cys Pro Gly Gln Phe Thr Cys Arg 305 310 315 Thr Gly Arg Cys Ile Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp 330 325 Cys Thr Asp His Ser Asp Glu Leu Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr Cys Lys Asn Lys Phe Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Val Asn Asp Cys Xaa Asp Asn Ser Asp Glu Gln Gly Cys Ser 375 Cys Pro Ala Gln Thr Phe Arg Cys Ser Asn Gly Lys Cys Leu Ser Lys 385 390 395 Ser Gln Gln Cys Asn Gly Lys Asp Asp Cys Gly Asp Gly Ser Asp Glu 405 410 Ala Ser Cys Pro Lys Val Asn Val Val Thr Cys Thr Lys His Thr Tyr 425 Arg Cys Leu Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro Glu Cys Asp 435 Gly Lys Glu Asp Cys Ser Asp Gly Ser Asp Glu Lys Asp Cys Asp Cys 455 Gly Leu Arg Ser Phe Thr Arg Gln Ala Arg Val Val Gly Gly Thr Asp 470 475 Ala Asp Glu Gly Glu Trp Pro Trp Gln Val Ser Leu His Ala Leu Gly 485 490 Gln Gly Thr Ser Xaa Gly Ala Ser Leu Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp Asp Arg Gly Phe Arg Tyr Ser Asp 520 Pro Thr Gln Xaa Thr Ala Phe Leu Gly Leu His Asp Gln Ser Gln Arg 530 535 Ser Xaa Leu Gly Cys Arg Ser Ala Gly Ser Ser Ala Ser Ser Pro Thr 550 555 Pro Ser Ser Met Thr Ser Pro Ser Thr Met Thr Ser Arg Cys Trp Ser

1214

Trp Arg Asn Arg Gln Ser Thr Ala Pro Trp Cys Gly Pro Ser Ala Cys 580 585 590

Arg Thr Pro Pro Met Ser Ser Leu Pro Ala Arg Pro Ser Gly Ser Arg 595 600 605

Ala Gly Asp Thr Pro Ser Met Glu Ala Leu Ala Arg 610 615 620

<210> 1194

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1194

Arg Thr Leu Cys His Leu Thr Thr Leu Asp Glu Leu Ser Cys Gln Arg
1 5 10 15

Glu Asn Leu Met Phe Lys Glu His Phe Pro Leu Ala Asp Val Thr Ala 20 25 30

Gly Phe Val Phe His Met Cys Phe Ser Tyr Thr His Leu Asn Ala Phe 35 40 45

Lys His Leu 50

<210> 1195

<211> 269

<212> PRT

<213> Homo sapiens

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<222> (245)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<220>

<221> SITE

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200

Glu Ile Ile Arg Asn Thr Leu Tyr Lys Ala Tyr Leu Glu Ser Phe Tyr

Lys Phe Cys Thr Leu Leu Gly Gly Thr Thr Ala Asp Ala Met Cys Pro

195

<223> Xaa equals any of the naturally occurring L-amino acids

1216

235 240 225 230 Ile Leu Glu Phe Xaa Xaa Gln Thr Val Pro Ser Ser Phe His Thr Val 245 250 Xaa Gly Ser Thr Leu Arg Ala Trp Arg Xaa Gly Ser Gly 265 <210> 1196 <211> 301 <212> PRT <213> Homo sapiens <400> 1196 Arg His Glu Pro Ala Pro Arg Glu Ala Pro Gly Ser Arg Ala Ser Ala Phe Leu Leu Pro Ser Phe Leu Pro Gly Pro Arg Leu Val Pro Ala Gly 20 25 His Pro Thr Ala Thr Met Phe Val Pro Cys Gly Glu Ser Ala Pro Asp 40 Leu Ala Gly Phe Thr Leu Leu Met Pro Ala Val Ser Val Gly Asn Val 55 Gly Gln Leu Ala Met Asp Leu Ile Ile Ser Thr Leu Asn Met Ser Lys 65 70 Ile Gly Tyr Phe Tyr Thr Asp Cys Leu Val Pro Met Val Gly Asn Asn Pro Tyr Ala Thr Thr Glu Gly Asn Ser Thr Glu Leu Ser Ile Asn Ala 105 Glu Val Tyr Ser Leu Pro Ser Arg Lys Leu Val Ala Leu Gln Leu Arg 115 120 Ser Ile Phe Ile Lys Tyr Lys Ser Lys Pro Phe Cys Glu Lys Leu Leu 135 Ser Trp Val Lys Ser Ser Gly Cys Ala Arg Val Ile Val Leu Ser Ser 155 Ser His Ser Tyr Gln Arg Asn Asp Leu Gln Leu Arg Ser Thr'Pro Phe 165 170 Arg Tyr Leu Leu Thr Pro Ser Met Gln Lys Ser Val Gln Asn Lys Ile

185

Lys Ser Leu Asn Trp Glu Glu Met Glu Lys Ser Arg Cys Ile Pro Glu 195 200 205 Ile Asp Asp Ser Glu Phe Cys Ile Arg Ile Pro Gly Gly Ile Thr 215 Lys Thr Leu Tyr Asp Glu Ser Cys Ser Lys Glu Ile Gln Met Ala Val 230 235 Leu Leu Lys Phe Val Ser Glu Gly Asp Asn Ile Pro Asp Ala Leu Gly 245 250 Leu Val Glu Tyr Leu Asn Glu Trp Leu Gln Ile Leu Lys Pro Leu Ser 265 Asp Asp Pro Thr Val Ser Ala Ser Arg Trp Lys. Ile Pro Ser Ser Trp 275 280 Arg Leu Leu Phe Gly Ser Gly Leu Pro Pro Ala Leu Phe 290 295 <210> 1197 <211> 246 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (230) <223> Xaa equals any of the naturally occurring L-amino acids

Lys Ser Phe Ala Arg Lys Phe Ile Asn Leu Asn Glu Phe Thr Thr Tyr 20 25 30

Gly Thr Arg Asp Leu Leu Leu Ala Ala Ala Ala Thr Gly Lys Leu

10

<400> 1197

WO 00/55350

1218

PCT/US00/05882

Gly Ser Glu Glu Ser Thr Lys Pro Ala Ser Val Arg Ala Leu Leu Phe 35 40 45

Xaa Ile Ser Phe Leu Met Leu Cys His Val Ala Gln Thr Tyr Gly Ser 50 55 60

Xaa Val Ile Leu Ser Glu Ser Arg Thr Gly Ala Glu Val Pro Phe Phe 65 70 75 80

Glu Thr Trp Met Gln Thr Cys Met Pro Glu Glu Gly Lys Ile Leu Asn 85 90 95

Pro Asp His Pro Cys Phe Arg Pro Asp Ser Thr Lys Val Glu Ser Leu 100 105 110

Val Ala Leu Leu Asn Asn Ser Ser Glu Met Lys Leu Val Gln Met Lys 115 120 125

Trp His Glu Ala Cys Leu Ser Ile Ser Ala Ala Ile Leu Glu Ile Leu 130 135 140

Asn Ala Trp Glu Asn Gly Val Leu Ala Phe Glu Ser Ile Gln Lys Ile 145 150 155 160

Thr Asp Asn Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val 165 170 175

Ala Trp Leu Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu 180 185 190

Lys Ser Leu Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu 195 200 205

Asn Thr Leu Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile 210 215 220

Leu Gly Ala His Val Xaa Arg Arg Ala Ala Ala Asp Ser His Ala Gly 225 230 235 240

Phe Lys Phe Pro Ser Asn 245

<210> 1198

<211> 465

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (203)
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<221> SITE <222> (461)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1198

Lys Asn Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu
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Thr Asn Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu 20 25 30

Gln Ala Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg 35 40 45

Ile Leu Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly 50 55 60

Lys Asn Ile Lys Ala Leu Arg Thr Asp Tyr Asn Ala Ser Val Ser Val 65 70 75 80

Pro Asp Ser Ser Gly Pro Glu Arg Ile Leu Ser Ile Ser Ala Asp Ile 85 90 95

Glu Thr Ile Gly Glu Ile Leu Lys Lys Ile Ile Pro Thr Leu Glu Glu 100 105 110

Gly Leu Gln Leu Pro Ser Pro Thr Ala Thr Ser Gln Leu Pro Leu Glu 115 120 125

Ser Asp Ala Val Glu Cys Leu Asn Tyr Gln His Tyr Lys Gly Ser Asp 130 135 140

Phe Asp Cys Glu Leu Arg Leu Leu Ile His Gln Ser Leu Ala Gly Gly
145 150 155 160

Ile Ile Gly Val Lys Gly Ala Lys Ile Lys Glu Leu Arg Glu Asn Thr 165 170 175

Gln Thr Thr Ile Lys Leu Phe Gln Glu Cys Cys Pro His Ser Thr Asp 180 185 190

Arg Val Val Leu Ile Gly Gly Lys Pro Asp Xaa Val Val Glu Cys Ile

		195					200					205			
Lys	Ile 210	Ile	Leu	Asp	Leu	Ile 215	Ser	Glu	Ser	Pro	Ile 220	Lys	Gly	Arg	Ala
Gln 225	Pro	Tyr	Asp	Pro	Asn 230	Phe	Tyr	Asp	Glu	Thr 235	Tyr	Asp	Tyr	Gly	Gly 240
Phe	Thr	Met	Met	Phe 245	Asp	Asp	Arg	Arg	Gly 250	Arg	Pro	Val	Gly	Phe 255	Pro
Met	Arg	Gly	Arg 260	Gly	Gly	Phe	Asp	Arg 265	Met	Pro	Pro	Gly	Arg 270	Gly	Gly
Arg	Pro	Met 275	Pro	Pro	Ser	Arg	Arg 280	Asp	Tyr	Asp	Asp	Met 285	Ser	Pro	Arg
Arg	Gly 290	Pro	Pro	Pro	Pro	Pro 295	Pro	Gly	Arg	Gly	Gly 300	Arg	Gly	Gly	Ser
Arg 305	Ala	Arg	Asn	Leu	Pro 310	Leu	Pro	Pro	Pro	Pro 315	Pro	Pro	Arg	Gly	Gly 320
Asp	Leu	Met	Ala	Tyr 325	Asp	Arg	Arg	Gly	Arg 330	Pro	Gly	Asp	Arg	Туг 335	Asp
Gly	Met	Val_	Gly 340	Phe	Ser	Ala	Asp	Glu 345	Thr	Trp	Asp	Ser	Ala 350	Ile	Asp
Thr	Trp	Ser 355	Pro	Ser	Glu	Trp	Gln 360	Met	Ala	Туг	Glu	Pro 365	Gln	Gly	Gly
Ser	Gly 370	Tyr	Asp	Tyr	Ser	Tyr 375	Ala	Gly	Gly	Arg	Gly 380	Ser	Tyr	Gly	Asp
Leu 385	Gly	Gly	Pro	Ile	Ile 390	Thr	Thr	Gln	Val	Thr 395	Ile	Pro	Lys	Asp	Leu 400
Ala	Gly	Ser	Ile	11e 405	Gly	Lys	Gly	Gly	Gln 410	Arg	Ile	Lys	Gln	Ile 415	Arg
His	Glu	Ser	Gly 420	Ala	Ser	Ile	Lys	11e 425	Asp	Glu	Pro	Leu	Glu 430	Gly	Ser
Glu	Asp	Arg 435	Ile	Ile	Thr	Ile	Thr 440	Gly	Thr	Gln	Asp	Gln 445	Ile	Gln	Asn
Ala	Gln 450	Tyr	Leu	Leu	Gln	Asn 455	Ser	Val	Ser	Ser	Xaa 460	Xaa	Leu	Ala	Leu

1221

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<210> 1199
<211> 446
<212> PRT
<213> Homo sapiens
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<222> (88)
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<400> 1199
Tyr Pro Ala Ala Cys Xaa Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr
 Arg Pro His Glu Met Asp Gln Tyr Trp Gly Ile Gly Ser Leu Ala Ser
                               25
            20
Gly Ile Asn Leu Phe Thr Asn Ser Phe Glu Gly Pro Val Leu Asp His
                           40
Arg Tyr Tyr Ala Gly Gly Cys Ser Pro His Tyr Ile Leu Asn Thr Arg
Phe Arg Lys Pro Tyr Asn Val Glu Ser Tyr Thr Pro Gln Thr Gln Gly
 65
                    70
Lys Tyr Glu Phe Ile Leu Xaa Xaa Tyr Glu Ser Tyr Ser Asp Phe Glu
                                   90
                85
Arg Asn Val Thr Glu Lys Met Ala Ser Lys Ser Gly Phe Ser Phe Gly
                              105
Phe Lys Ile Pro Gly Ile Phe Glu Leu Gly Ile Ser Ser Gln Ser Asp
       115
Arg Gly Lys His Tyr Ile Arg Arg Thr Lys Arg Phe Ser His Thr Lys
   130
                                         140
                      135
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WO 00/55350

145		Pne	Leu	HIS	150	Arg	ser	Asp	Leu	155		АІА	nis	туг	160
Leu	Lys	Pro	Arg	Ser 165	Leu	Met	Leu	His	Туг 170		Phe	Leu	Gln	Arg 175	
Lys	Arg	Leu	Pro 180		Glu	Tyr	Ser	Tyr 185		Glu	Tyr	Arg	Asp 190	Leu	Phe
Arg	Asp	Phe 195	Gly	Thr	His	Tyr	Ile 200	Thr	Glu	Ala	Val	Leu 205		Gly	Ile
Tyr	Glu 210	Tyr	Thr	Leu	Val	Met 215	Asn	Lys	Glu	Ala	Met 220	Glu	Arg	Gly	Asp
Туг 225	Thr	Leu	Asn	Asn	Val 230	His	Ala	Cys	Ala	Lys 235	Asn	Asp	Phe	Lys	11e
Gly	Gly	Ala	Ile	Glu 245	Glu	Val	Tyr	Val	Ser 250	Leu	Gly	Val	Ser	Val 255	Gly
	_		260		Leu			265					270		
		275	·		Leu		~280	. ,	.*.			285		9.51	J-1 11
	290				Ala	295					300				•
305					Ala 310					315					320
				325	Tyr				330					335	
			340		Gln			345					350		
		355			Cys		360			-		365			
	370				Ser	375					380				
385					Glu 390					395					400
Gly	Lys	Trp	Asn	Cys 405	Trp	Ser	Asn	Trp	Ser 410	Ser	Суз	Ser	Gly	Arg 415	Arg

Lys Thr Arg Gln Arg Gln Cys Asn Asn Pro Pro Pro Gln Asn Gly Gly 420 425 430

Ser Pro Cys Ser Gly Pro Ala Ser Glu Thr Leu Asp Cys Ser 435 440 445

<210> 1200

<211> 437

<212> PRT

<213> Homo sapiens

<400> 1200

Leu Gly Ser Ser Asp Ser Tyr Ala Ser Pro Gly Arg Ala Ala Ala Pro 1 5 10 15

Pro Ala Ala Gly Pro Gly Asp Thr Ser Ala Cys Tyr Lys Ser Ser 20 25 30

Gly Pro Arg Cys Leu Leu Pro Asp Leu Ala Pro Ser Ser Glu Pro Gly
35 40 45

Ala Cys Leu Gly Gly Leu Ser Val Phe Thr Met Glu Gln Leu Ser Ser 50 55 60

Ala Asn Thr Arg Phe Ala Leu Asp Leu Phe Leu Ala Leu Ser Glu Asn 65 70 75 80

Asn Pro Ala Gly Asn Ile Phe Ile Ser Pro Phe Ser Ile Ser Ser Ala 85 90 95

Met Ala Met Val Phe Leu Gly Thr Arg Gly Asn Thr Ala Ala Gln Leu 100 105 110

Ser Lys Thr Phe His Phe Asn Thr Val Glu Glu Val His Ser Arg Phe 115 120 125

Gln Ser Leu Asn Ala Asp Ile Asn Lys Arg Gly Ala Ser Tyr Ile Leu 130 135 140

Lys Leu Ala Asn Arg Leu Tyr Gly Glu Lys Thr Tyr Asn Phe Leu Pro 145 150 155 160

Glu Phe Leu Val Ser Thr Gln Lys Thr Tyr Gly Ala Asp Leu Ala Ser 165 170 .175

Val Asp Phe Gln His Ala Ser Glu Asp Ala Arg Lys Thr Ile Asn Gln 180 185 190

1224

Trp Val Lys Gly Gln Thr Glu Gly Lys Ile Pro Glu Leu Leu Ala Ser 200 Gly Met Val Asp Asn Met Thr Lys Leu Val Leu Val Asn Ala Ile Tyr 215 Phe Lys Gly Asn Trp Lys Asp Lys Phe Met Lys Glu Ala Thr Thr Asn 230 235 Ala Pro Phe Arg Leu Asn Lys Lys Asp Arg Lys Thr Val Lys Met Met 250 Tyr Gln Lys Lys Lys Phe Ala Tyr Gly Tyr Ile Glu Asp Leu Lys Cys 265 Arg Val Leu Glu Leu Pro Tyr Gln Gly Glu Glu Leu Ser Met Val Ile 275 280 Leu Leu Pro Asp Asp Ile Glu Asp Glu Ser Thr Gly Leu Lys Lys Ile 295 Glu Glu Gln Leu Thr Leu Glu Lys Leu His Glu Trp Thr Lys Pro Glu 310 315 Asn Leu Asp Phe Ile Glu Val Asn Val Ser Leu Pro Arg Phe Lys Leu 325 330 335 Glu Glu Ser Tyr Thr Leu Asn Ser Asp Leu Ala Arg Leu Gly Val Gln 345 Asp Leu Phe Asn Ser Ser Lys Ala Asp Leu Ser Gly Met Ser Gly Ala 360 Arg Asp Ile Phe Ile Ser Lys Ile Val His Lys Ser Phe Val Glu Val 370 375 Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Ala Gly Ile Ala Thr 395 Phe Cys Met Leu Met Pro Glu Glu Asn Phe Thr Ala Asp His Pro Phe Leu Phe Phe Ile Arg His Asn Ser Ser Gly Ser Ile Leu Phe Leu Gly 420 425

Arg Phe Ser Ser Pro 435

1225

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<211> 82
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1201
Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe
Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp
Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val
                             40
Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser
                                             60
     50
                        55
Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu
65
Cys Xaa
<210> 1202
<211> 126
<212> PRT
<213> Homo sapiens
<400> 1202
Ile Ser Arg Ser Ser Ala Arg Arg Gln Pro Phe Arg His Gly Arg Leu
Trp Arg Ala Ala Met Ala Leu Arg Tyr Pro Met Ala Val Gly Leu
                                                     30
             20
                                 25
Asn Lys Gly His Lys Val Thr Lys Asn Val Ser Lys Pro Arg His Ser
        35
Arg Arg Arg Gly Arg Leu Thr Lys His Thr Lys Phe Val Arg Asp Met
```

Ile Arg Glu Val Cys Gly Phe Ala Pro Tyr Glu Arg Arg Ala Met Glu

75

1226

Leu Leu Lys Val Ser Lys Asp Lys Arg Ala Leu Lys Phe Ile Lys Lys
85 90 95

Arg Val Gly Thr His Ile Arg Ala Lys Arg Lys Arg Glu Glu Leu Ser 100 105 110

Asn Val Leu Ala Ala Met Arg Lys Ala Ala Ala Lys Lys Asp 115 120 125

<210> 1203

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1203

Asp Trp Asn Pro Asp Leu Gln Ala Ser Ala Val Cys Ile Lys Arg Val 1 5 10 15

Gly Glu Ser Gly Pro Leu Ala Gln Glu Pro Xaa Leu Leu Lys Glu Gly
20 25 30

Phe Lys Ala Lys Trp Val Cys Gln Arg Cys Cys Leu Pro Phe Leu Glu .

35 40 45

Met Leu Ile Ser Leu Ser Lys Thr Glu Lys Ser Arg Cys Tyr Arg Asn 50 55 60

Asn Leu Val Cys Cys Ile Asn Cys Ser Trp Ala Trp Ser Ser Ile Pro 65 70 75 80

Thr Leu Arg Phe Pro Ala Ser Leu Cys Cys Pro Gly Ser His Ser Cys 85 90 95

Arg Arg Pro Asn Pro Leu Ala Val Phe Cys Leu Lys Ile Trp Gly Ala 100 105 110

Pro Ser Leu Ser Ser Pro Gly Asn Ser Leu Ala Glu Gly Gly Asp Pro 115 120 125

Pro Gln

PCT/US00/05882

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<210> 1204
<211> 228
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1204
Trp Ala Ala Phe Glu Pro Ala Thr Leu Ala Trp Lys Phe Pro Phe Gln
Ser Gly Phe Cys Leu Leu Pro Ser Pro Ser Pro Arg Tyr Leu Phe
                                 25
             20
Thr Ser His Leu Ile Ser Leu Cys Ser Ser Val Ser Pro Thr His Ile
         35
                             40
                                                  45
Ile Gly Asp Ser Gly Gly Ser Leu Thr Ser Leu Leu Ser Asn Ala Arg
Pro Ser Gly Leu Ala Ser Val Ala Ser His Ile Asp Val Thr Leu Glu
                                          75
                     70
Leu Leu Pro Gln Arg Gly Arg Arg Asp Arg Leu Ser Pro His Leu Pro
                                     90
                 85
Pro Tyr Ser Pro Leu Tyr Ser Arg Phe Asp His Leu Ser Pro Ser Ala
            100
                                105
                                                     110
```

Ala Pro Ser His Phe Gly Gln Ser Gln Ala Pro Ile Arg Leu Pro Pro 115 120 125

Pro Pro Gly Ala Pro Ser Ile Ser Leu Ser Pro Leu Pro Gln Asn Leu 130 135 140

Cys Lys Gly Tyr Glu Arg Asp Pro Leu Pro Ser Arg Pro Pro Leu Arg 145 150 155 160

Ala Val Arg Ser Lys Lys Gln Lys Leu Val Gly Gly Trp Leu Gly Leu 165 170 175

Cys Pro Val Pro Arg Trp Asp Lys Leu Ala Phe Ser Xaa Ile Pro Ser 180 185 190

Trp Val Pro Xaa Ser Phe Xaa Ala Pro Gly Ala Arg Thr His Cys Ala 195 200 205

Val Phe Leu Phe Ser Phe Val Gly Lys Gly Thr Lys Val Phe Ala Lys 210 215 220

Xaa Pro Val Xaa 225

WO 00/55350

<210> 1205

<211> 270

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1205

Leu Pro Gly Ala Val Ala Ala Ser Ser Gly Ser Pro Pro Gly Ser Ala
1 5 10 15

Leu Ala Ala Val Ala Ser Gly Gly Asp Leu Phe Pro Gly Gln Pro Val 20 25 30

Ser Glu Leu Ile Ala Gln Leu Leu Arg Ala Glu Pro Tyr Pro Ala Ala 35 40 45

Ala Gly Arg Phe Gly Ala Gly Gly Gly Ala Ala Gly Ala Val Leu Gly 50 55 60

Ile Asp Asn Val Cys Glu Leu Ala Ala Arg Leu Leu Phe Ser Thr Val

1229

65					70					75					80
Glu	Trp	Ala	Arg	His 85	Ala	Pro	Phe	Phe	Pro 90	Glu	Leu	Pro	Val	Ala 95	Asp
Gln	Val	Ala	Leu 100	Leu	Arg	Leu	Ser	Trp 105	Ser	Glu	Leu	Phe	Val 110	Leu	Asn
Ala	Ala	Gln 115	Ala	Ala	Leu	Pro	Leu 120	His	Thr	Ala	Pro	Leu 125	Leu	Ala	Xaa
Ala	Gly 130	Leu	His	Ala	Ala	Pro 135	Met	Ala	Ala	Glu	Arg 140	Ala	Val	Ala	Phe
Mét 145	Asp	Gln	Val	Arg	Ala 150	Phe	Gln	Glu	Gln	va1 155	Asp	Lys	Leu	Gly	Arg 160
Leu	Gln	Val	Asp	Ser 165	Ala	Glu	Tyr	Gly	Cys 170	Leu	Lys	Ala	Ile	Ala 175	Leu
Phe	Thr	Pro	Asp 180	Ala	Cys	Gly	Leu	Ser 185	Asp	Pro	Ala	His	Val 190	Glu	Ser
Leu	Gln	Glu 195	Lys	Ala	Gln	Val	Ala 200	Leu	Thr	Glu	Tyr	Val 205	Arg	Ala	Gln
Tyr	Pro 210	Ser	Gln	Pro	Gln	Arg 215	Phe	Gly	Arg	Leu	Leu 220	Leu	Arg	Leu.	Pro
Ala 225	Leu	Arg	Ala	Val	Pro 230	Ala	Ser	Leu	Ile	Ser 235	Gln	Leu	Phe	Phe	Met 240
Arg	Leu	Val	Gly	Lys 245	Thr	Pro	Ile	Glu	Thr 250	Leu	Ile	Arg	Asp	Met 255	Leu
Leu	Ser	Gly	Ser 260	Thr	Phe	Asn	Trp	Pro 265	Tyr	Gly	Ser	Gly	Gln 270		
				•											
	> 12														
	> 89														
	<212> PRT <213> Homo sapiens														
<400	> 12	06													
			Cys	S r 5	Asp	Lys	Tyr	Phe	Thr 10	Phe	Phe	Ser	Val	His 15	Gln

Arg Glu Arg Asp Pro Pro Thr Ala Val Thr Ser Lys Cys Ser Cys Ser 25

20

PCT/US00/05882

Ile Asn Gly Val Thr Asp Thr Glu Val His Ser Trp Phe Leu Ser Arg

Val Val Ile Leu Val Ser Trp Ser Leu Gly His Trp Gly Cys Thr Leu 50 55 60

Lys Ser Pro Asn Arg Leu Ala Ile Lys Ile Asn Lys Ala Ala Ala Pro 65 70 75 80

Phe Gln Phe Thr Phe His Leu Thr Gln 85

<210> 1207

WO 00/55350

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1207

Cys Val Gly Lys Ala Gly Val Glu Leu Gly Cys Ser Gly Glu Gly Val 1 5 10 15

Val Lys Lys Ala Ser Ser Arg Gly His Lys Ala Arg Phe Pro Leu Arg 20 25 30

Ser His Lys Val Leu Ser Pro Ala Pro Gly Ala Gly Gly Val His Gly
35 40 45

Pro Gly Phe Thr Ser Thr His Pro Ala His Pro Arg Gly Glu Gly Pro 50 55 60

Arg Ala Pro Gly Pro Ala Ala Asp Arg Ile Leu Cys Lys Leu Cys Ser 65 70 75 80

Val His Cys Lys Thr Pro Ala Gln Leu Ala Gly His Met Gln Thr His
85 90 95

Leu Gly Gly Ala Ala Pro Leu Ser Arg Glu Thr Pro Pro Ser His Ser 100 105 110

Pro Pro Ala Glu Gly Asp Pro Arg Thr His Gln Val Leu Val Arg Phe 115 120 125

Val Gln Trp Arg Gln Arg Gln Xaa Arg Gln Arg Gln Gln Arg Gln

140 130 135 Gln 145 <210> 1208 <211> 378 <212> PRT <213> Homo sapiens <400> 1208 Ser Ala Ser Arg Ala Thr Ala Met Ser Ser Arg Gly Gly Lys Lys Ser Thr Lys Thr Ser Arg Ser Ala Lys Ala Gly Val Ile Phe Pro Val 25 Gly Arg Met Leu Arg Tyr Ile Lys Lys Gly His Pro Lys Tyr Arg Ile Gly Val Gly Ala Pro Val Tyr Met Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys 7,0 7.5 Gly Arg Val Thr Pro Arg His Ile Leu Leu Ala Val Ala Asn Asp Glu 85 Glu Leu Asn Gln Leu Leu Lys Gly Val Thr Ile Ala Ser Gly Gly Val 105 100 Leu Pro Asn Ile His Pro Glu Leu Leu Ala Lys Lys Arg Gly Ser Lys 120 Gly Lys Leu Glu Ala Ile Ile Thr Pro Pro Pro Ala Lys Lys Ala Lys 130 Ser Pro Ser Gln Lys Lys Pro Val Ser Lys Lys Ala Gly Gly Lys Lys 150 155 Gly Ala Arg Lys Ser Lys Lys Gln Gly Glu Val Ser Lys Ala Ala Ser 165 170 Ala Asp Ser Thr Thr Glu Gly Thr Pro Ala Asp Gly Phe Thr Val Leu 180 185 Ser Thr Lys Ser Leu Phe Leu Gly Gln Lys Leu Asn Leu Ile His Ser 200 205 195

Glu Ile Ser Asn Leu Ala Gly Phe Glu Val Glu Ala Ile Ile Asn Pro 210 215 220

Thr Asn Ala Asp Ile Asp Leu Lys Asp Asp Leu Gly Asn Thr Leu Glu 225 230 235 240

Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu Leu Arg Lys 245 250 255

Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser Ala Gly His 260 265 270

Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro Val Trp Gly 275 280 285

Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys Asn Cys Leu 290 295 300

Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe Pro Ser Ile 305 310 315 320

Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala Gln Leu Ile 325 330 335

Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser Ser Ser Ile 340 345 350

Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile Gly Ile Tyr 355 360 365

Val Gln Glu Met Ala Lys Leu Asp Ala Asn 370 375

<210> 1209

<211> 220

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<22	0>														
<22	1> s	ITE													
<22	2> (	27)													
<22	3> x	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1														
Arg	Gly	Gly	Lys	Ile	Xaa	Asp	Thr	Phe		_	Tyr	Ala	Arg		Туз
1		•		5					10					15	
		_,		_		_					• 1 -	D	<b>01</b>		
Arg	ser	GTÄ			GIĀ	ser	Tnr		АТА	хаа	Ala	Pro	30	Ala	met
			20					25					30		
Ara	Leu	Ser	T.eu	Pro	T.e.n	T.eu	T.e.	T.eu	T.eu	I.eu	Gly	Ala	Trp	Ala	Tle
		35					40				1	45			
					<b>:</b> .										
Pro	Gly	Gly	Leu	Gly	Asp	Arg	Ala	Pro	Leu	Thr	Äla	Thr	Ala	Pro	Glr
	50					55					60				
Leu	Asp	Asp	Glu	Glu	Met	Tyr	Ser	Ala	His		Pro	Ala	His	Leu	
65					70			,		75					80
_			_					_			_	~-3	_	_	
Cys	Asp	Ala	Cys	_	Ala	Val	Ala	Tyr		Met	Trp	GIn	Asn		Ala
				85					90					95	
T.vg	A12	Glu	Thr	T.ve	Len	Hic	<b>ም</b> ስ ነገ	Ser	Acn	Ser	Gly	Glv	Ara	Ara	Gla
273	77.44	Oru	100	Lys	Deu			105		501	011	011	110	5	
			100									_			
Leu	Ser	Glu	Leu	Val	Tyr	Thr	Asp	Val	Leu	Asp	Arg	Ser	Cys	Ser	Arg
		115			_		120			_		125	-		
				•								,	,		
Asn	Trp	Gln	Asp	Tyr	Gly	Val	Arg	Glu	Val	Asp	Gln	Va⁄1	Lys	Arg	Leu
	130					135					140				
									_			_			
	Gly	Pro	Gly	Leu		Glu	Gly	Pro	Glu		Ser	Ile	Ser	Val	
145					150					155					160
Va 1	Thr.	Glv	G1v	Dro	Trn	Pro	Thr	Ara	T.011	Sor	Arg	Th r	Cva	T.em	Hic
Val	1111	GLY	GLY	165	11P	110	1	nr 9	170	561	my	1111	Cys	175	*****
				103											
Tyr	Leu	Gly	Glu	Phe	Gly	Glu	Asp	Gln	Ile	Tyr	Glu	Ala	His	Gln	Gln
-		-	180		•		_	185		-			190		
Gly	Arg	Gly	Ala	Leu	Glu	Ala	Leu	Leu	Cys	Gly	Gly	Pro	Gln	Gly	Ala
		195					200					205			
Cys	Ser	Glu	Lys	Val	Ser	Ala	Thr	Arg	Glu	Glu	Leu				

<211> 231 <212> PRT <213> Homo sapiens <400> 1210 Ala Leu Ser Pro Ala Met Val Val Pro Glu Asp Gln Leu Thr Arg Trp 10 His Pro Arg Phe Asn Val Asp Glu Val Pro Asp Ile Glu Pro Ala Ala 20 25 Leu Pro Gln Pro Pro Ala Thr Glu Lys Leu Thr Thr Ala Gln Glu Val 40 Leu Ala Arg Ala Arg Asn Leu Ile Ser Pro Arg Met Glu Lys Ala Leu 55 Ser Gln Leu Ala Leu Arg Ser Ala Ala Pro Ser Ser Pro Gly Ser Pro 70 Arg Pro Ala Leu Pro Ala Thr Pro Pro Ala Thr Pro Pro Ala Ala Ser Pro Ser Ala Leu Lys Gly Val Ser Gln Asp Leu Leu Glu Arg Ile Arg 105 Ala Lys Glu Ala Gln Lys Gln Leu Ala Gln Met Thr Arg Cys Pro Glu 115 120 Gln Glu Gln Arg Leu Gln Arg Leu Glu Arg Leu Pro Glu Leu Ala Arg 135 140 Val Leu Arg Ser Val Phe Val Ser Glu Arg Lys Pro Ala Leu Ser Met 155 Glu Val Ala Cys Ala Arg Met Val Gly Ser Cys Cys Thr Ile Met Ser 165 Pro Gly Glu Met Glu Lys His Leu Leu Leu Ser Glu Leu Leu Pro 185 Asp Trp Leu Ser Leu His Arg Ile Arg Thr Asp Thr Tyr Val Lys Leu 200 Asp Lys Ala Ala Asp Leu Ala His Ile Thr Ala Arg Leu Ala His Gln 210 215 220

Thr Arg Ala Glu Glu Gly Leu

230

<210> 1211

WO 00/55350 PCT/US00/05882

1235

<211> 346 <212> PRT <213> Homo sapiens <400> 1211 Asn Cys Thr Thr Ile Ser Leu Wal Tyr Leu His Phe Val Phe Tyr Asn Ser Tyr Ser Leu Phe Pro Ser Lys Glu Asn Cys Val Tyr Glu Thr Val Val Leu Pro Leu Asp Glu Arg Ala Phe Glu Lys Thr Leu Thr Pro Ile 40 Ile Gln Glu Tyr Phe Glu His Gly Asp Thr Asn Glu Val Ala Glu Met Leu Arg Asp Leu Asn Leu Gly Glu Met Lys Ser Gly Val Pro Val Leu 65 70 75 Ala Val Ser Leu Ala Leu Glu Gly Lys Ala Ser His Arg Glu Met Thr Ser Lys Leu Ser Asp Leu Cys Gly Thr Val Met Ser Thr Thr Asp 1.05 Val Glu Lys Ser Phe Asp Lys Leu Leu Lys Asp Leu Pro Glu Leu Ala 115 120 Leu Asp Thr Pro Arg Ala Pro Gln Leu Val Gly Gln Phe Ile Ala Arg 135 Ala Val Gly Asp Gly Ile Leu Cys Asn Thr Tyr Ile Asp Ser Tyr Lys 150 155 Gly Thr Val Asp Cys Val Gln Ala Arg Ala Ala Leu Asp Lys Ala Thr Val Leu Leu Ser Met Ser Lys Gly Gly Lys Arg Lys Asp Ser Val Trp Gly Ser Gly Gly Gln Gln Ser Val Asn His Leu Val Lys Glu Ile 200 Asp Met Leu Leu Lys Glu Tyr Leu Leu Ser Gly Asp Ile Ser Glu Ala 210 215 Glu His Cys Leu Lys Glu Leu Glu Val Pro His Phe His Glu Leu 225 230 235 240

1236

Val Tyr Glu Ala Ile Ile Met Val Leu Glu Ser Thr Gly Glu Ser Thr 245 250 255

Phe Lys Met Ile Leu Asp Leu Leu Lys Ser Leu Trp Lys Ser Ser Thr
260 265 270

Ile Thr Val Asp Gln Met Lys Arg Gly Tyr Glu Arg Ile Tyr Asn Glu 275 280 285

Ile Pro Asp Ile Asn Leu Asp Val Pro His Ser Tyr Ser Val Leu Glu 290 295 300

Arg Phe Val Glu Glu Cys Phe Gln Ala Gly Ile Ile Ser Lys Gln Leu 305 310 315 320

Arg Asp Leu Cys Pro Ser Arg Gly Arg Lys Arg Phe Val Ser Glu Gly 325 330 335

Asp Gly Gly Arg Leu Lys Pro Glu Ser Tyr 340 345

<210> 1212

<211> 175

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1212

Pro Arg Xaa Ile Val Ser Ala Ala Cys Gly Arg Asn His Thr Leu Ala 1 5 10 15

Leu Thr Glu Thr Gly Ser Val Phe Ala Phe Gly Glu Asn Lys Met Gly 20 25 30

Gln Leu Gly Leu Gly Asn Gln Thr Asp Ala Val Pro Ser Pro Ala Gln 35 46 45

Ile Met Tyr Asn Gly Gln Pro Ile Thr Lys M t Ala Cys Gly Xaa Glu 50 55 60

Phe Ser Met Ile Met Asp Cys Lys Gly Asn Leu Tyr Ser Phe Gly Cys 65 70 Pro Glu Tyr Gly Gln Leu Gly His Asn Ser Asp Gly Lys Phe Ile Ala 90 Arg Ala Gln Arg Ile Glu Tyr Asp Cys Glu Leu Val Pro Arg Arg Val 105 Ala Ile Phe Ile Glu Lys Thr Lys Asp Gly Gln Ile Leu Pro Val Pro 115 120 125 Asn Val Val Arg Asp Val Ala Cys Gly Ala Asn His Thr Leu Val 135 Leu Asp Ser Gln Lys Arg Val Phe Ser Trp Gly Phe Gly Gly Tyr Gly 150 155 Arg Leu Gly Thr Gln Ser Arg Arg Met Arg Trp Ser Pro Ala Trp 170 <210> 1213 <211> 127 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids Cys Phe Ile Cys Val Trp Cys Lys Arg Lys Leu Asp Gln Ile Asn Leu 10 Gln Leu Met Ser Pro Asn Ala Asn Thr Gly Thr His Met His Thr Pro Ile Asn Thr His Thr Val His Leu Xaa Lys Gly Gln Val Ile Ser His

Val Thr Ser Lys Ala Arg Ala Thr Cys Ala His Gln Thr Cys Ile Lys
65 70 75 80

Pro Asn Phe Thr Ser Thr Asp Pro Leu Ala Pro Thr Pro Ala Ser Thr

55

50

Gln Leu Ala Gly Asp Gly Cys Gly Ala Gly Gly Leu Ser Asp Gly Ser

85 90 95

Leu Leu Pro Leu Leu Arg Val Lys Leu Leu Ser Phe Leu Arg Val 100 105 110

Tyr Leu Cys Gln Val Cys Ala Phe Asn Cys Phe Tyr Phe Val Phe 115 120 125

<210> 1214

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1214

Cys Thr Trp Asn Arg Cys Ser Ala Ser Pro Ala Gly Trp Gln Asn Ser

1 5 10 15

Phe Leu Gly His Leu Asn Pro Ser Ser Leu Leu Gln Asn Pro Pro Ala 20 25 30

Asn Arg Ile Gly Met Gly Ala Thr Leu Asp Ile Gln Arg Gln Gln Arg 35 40 45

Met Glu Leu Leu Asp Arg Gln Leu Met Phe Ser Gln Phe Ala Gln Gly
50 55 60

Arg Arg Gln Arg Gln Gln Gln Gly Gly Met Ile Asn Trp Asn Arg Leu
65 70 75 80

Phe Pro Pro Leu Arg Gln Arg Gln Asn Val Asn Tyr Gln Gly Gly Arg 85 90 95

Gln Ser Glu Pro Ala Ala Pro Pro Leu Glu Val Ser Glu Glu Gln Val
100 105 110

Ala Arg Leu Met Glu Met Gly Phe Ser Arg Gly Asp Ala Leu Glu Ala 115 120 125

Leu Arg Ala Ser Asn Asn Asp Leu Asn Val Ala Thr Asn Phe Leu Leu 130 135 140

Gln His

<210> 1215

<211> 116

<212> PRT

1239

<213> Homo sapiens <220> <221> SITE <222> (107) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (108) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1215 Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys 5 10 Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys 25 Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly 45 35 40 Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser ... 70 Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys 85 90 Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser 105 110 100 Phe Leu Gln Gln 115 . <210> 1216 <211> 201 <212> PRT <213> Homo sapiens <400> 1216 Ala Ala Gly Gly Glu Gly Phe Gly Ser Leu His Ala Ser Leu Val Gly Phe Arg Gly Val Val Ala Gly Cys Ala Arg His Phe Arg Ala Ser Arg

25

PCT/US00/05882

Asn Gly Val Ala Asn Gly Leu Gln Ser Asn Met Pro Lys Phe Tyr Cys Asp Tyr Cys Asp Thr Tyr Leu Thr His Asp Ser Pro Ser Val Arg Lys 55 Thr His Cys Ser Gly Arg Lys His Lys Glu Asn Val Lys Asp Tyr Tyr 70 Gln Lys Trp Met Glu Glu Gln Ala Gln Ser Leu Ile Asp Lys Thr Thr 90 Ala Ala Phe Gln Gln Gly Lys Ile Pro Pro Thr Pro Phe Ser Ala Pro 105 Pro Pro Ala Gly Ala Met Ile Pro Pro Pro Pro Ser Leu Pro Gly Pro 120 125 . 115 Pro Arg Pro Gly Met Met Pro Ala Pro His Met Gly Gly Pro Pro Met 135 Met Pro Met Met Gly Pro Pro Pro Gly Met Met Pro Val Gly Pro 150 155 Ala Pro Gly Met Arg Pro Pro Met Gly Gly His Met Pro Met Met Pro 170 165 Gly Pro Pro Met Met Arg Pro Pro Ala Arg Pro Met Met Val Pro Thr 180 185 Arg Pro Gly Met Thr Arg Pro Asp Arg 195

<210> 1217

WO 00/55350

<211> 473

<212> PRT

<213> Homo sapiens

<400> 1217

Lys Phe Thr Met Lys Phe Leu Leu Ile Leu Leu Leu Gln Ala Thr Ala 1 5 10 15

Ser Gly Ala Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn 20 25 30

Val Leu Phe Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile 35 40 45

Asn Lys Leu Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys

	50					55					60				
Glu 65		Ile	Gln	Glu	Met 70	Gln	His	Phe	Leu	Gly 75	Leu	Lys	Val	Thr	Gl <sub>3</sub> 80
Gln	Leu	Asp	Thr	Ser 85	Thr	Leu	<b>Gl</b> u	Met	Met 90	His	Ala	Pro	Arg	Cys 95	Gly
Val	Pro	Asp	Val 100	His	His	Phe	Arg	Glu 105	Met	Pro	Gly	Gly	Pro 110	Val	Tr
Arg	Lys	His 115	Tyr	Ile	Thr	Tyr	Arg 120	Ile	Asn	Asn	Tyr	Thr 125	Pro	Asp	Met
Asn	Arg 130	Glu	Asp	Val	Asp	Туг 135	Ala	Ile	Arg	Lys	Ala 140	Phe	Gln	Val	Trp
Ser 145	Asn	Val	Thr	Pro	Leu 150	Lys	Phe	Ser	Lys	Ile 155	Asn	Thr	Gly	Met	Ala 160
Asp	Ile	Leu	Val	Val 165		Ala	Arg	Gly	Ala 170	His	Gly	Asp	Phe	His 175	Ala
Phe	Asp	Gly	Lys 180	Gly	Gly	Ile	Leu	Ala 185	His	Ala	Phe	Gly	Pro 190	Gly	Ser
Gly	Ile	Gly 195	Gly	Asp	Ala	His	Phe 2 <b>0</b> 0	Asp	Glu	Asp	Glu	Phe 205	Trp	Thr	Thi
His	Ser 210	Gly	Gly	Thr	Asn	Leu 215	Phe	Leu	Thr	Ala	Val 220	His	Glu	Ile	Gly
His 225	Ser	Leu	Gly	Leu	Gly 230	His	Ser	Ser	Asp	Pro 235	Lys	Ala	Val	Met	Phe 240
Pro	Thr	Tyr	Lys	Tyr 245	Val	Asp	Ile	Asn	Thr 250	Phe	Arg	Leu	Ser	Ala 255	Asp
Asp	Ile	Arg	Gly 260	Ile	Gln	Ser	Leu	Tyr 265	Gly	Asp	Pro	Lys	Glu 270	Asn	Gln
Arg	Leu	Pro 275	Asn	Pro	Asp	Asn	Ser 280	Glu	Pro	Ala	Leu	Cys 285	Asp	Pro	Asn
Leu	Ser 290	Phe	Asp	Ala	Val	Thr 295	Thr	Val	Gly	Asn	Lys 300	Ile	Phe	Phe	Phe
Lys 305	Asp	Arg	Phe	Phe	Trp 310	Leu	Lys	Val	Ser	Glu 315	Arg	Pro	Lys	Thr	Ser 320
Val	Asn	Leu	Ile	Ser	Ser	Leu	Trp	Pro	Thr	Leu	Pro	Ser	Gly	Ile	Glu

1242

335 325 330 Ala Ala Tyr Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp 340 345 Asp Lys Tyr Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro 360 Lys Ser Ile His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp 370 375 Ala Ala Val Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp 390 395 Asn Gln Tyr Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly 410 405 Tyr Pro Lys Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile 425 420 Asp Ala Val Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly 440 Ser Asn Gln Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr 455 Leu Lys Ser Asn Ser Trp Phe Gly Cys 465 470 <210> 1218 <211> 598 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1218 Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys

10

Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly

WO 00/55350

1243

30 20 25 Gln Leu Ala Leu Phe Ser Val Ser Asp Lys Thr Gly Leu Val Glu Phe Ala Arg Asn Leu Thr Ala Leu Gly Leu Asn Leu Val Ala Ser Gly Gly 55 Thr Ala Lys Ala Leu Arg Asp Ala Gly Leu Ala Val Arg Asp Val Ser 70 Glu Leu Thr Gly Phe Pro Glu Met Leu Gly Gly Arg Val Lys Thr Leu His Pro Ala Val His Ala Gly Ile Leu Ala Arg Asn Ile Pro Glu Asp 105 Asn Ala Asp Met Ala Arg Leu Asp Phe Asn Leu Ile Arg Val Val Ala 115 120 Cys Asn Leu Tyr Pro Phe Val Lys Thr Val Ala Ser Pro Gly Val Xaa 135 Val Glu Glu Ala Val Glu Gln Ile Asp Ile Gly Gly Val Thr Leu Leu 150 155 Arg Ala Ala Lys Asn His Ala Arg Val Thr Val Val Cys Glu Pro 170 Glu Asp Tyr Val Val Val Ser Thr Glu Met Gln Ser Ser Glu Ser Lys 185 Asp Thr Ser Leu Glu Thr Arg Arg Gln Leu Ala Leu Lys Ala Phe Thr 200 His Thr Ala Gln Tyr Asp Glu Ala Ile Ser Asp Tyr Phe Arg Lys Gln 215 210 Tyr Ser Lys Gly Val Ser Gln Met Pro Leu Arg Tyr Gly Met Asn Pro 230 235 His Gln Thr Pro Ala Gln Leu Tyr Thr Leu Gln Pro Lys Leu Pro Ile 250 245 Thr Val Leu Asn Gly Ala Pro Gly Phe Ile Asn Leu Cys Asp Ala Leu Asn Ala Trp Gln Leu Val Lys Gin Leu Lys Glu Ala Leu Gly Ile Pro Ala Ala Ser Phe Lys His Val Ser Pro Ala Gly Ala Ala Val Gly

	290					295					300				
11e 305		Leu	Ser	Glu	Asp 310	Glu	Ala	Lys	Val	Cys 315		Val	Tyr	Asp	Let 320
туr	Lys	Thr	Leu	Thr 325		Ile	Ser	Ala	Ala 330		Ala	Arg	Ala	Arg 335	Gly
Ala	Asp	Arg	Met 340	Ser	Ser	Phe	Gly	Asp 345		Val	Ala	Leu	Ser 350	Asp	Va]
Cys	Asp	Val 355	Pro	Thr	Ala	Lys	11e 360	Ile	Ser	Arg	Glu	Val 365	Ser	Asp	Gl
Ile	Ile 370	Ala	Pro	Gly	Tyr	Glu 375	Glu	Glu	Ala	Leu	Thr 380	Ile	Leu	Ser	Lys
Lys 385	_	Asn	Gly	Asn	Tyr 390	Cys	Val	Leu	Gln	Met 395	Asp	Gln	Ser	Туr	Lys 400
Pro	Asp	Glu	Asn	Glu 405	Val	Arg	Thr	Leu	Phe 410	Gly	Leu	His	Leu	Ser 415	Glr
Lys	Arg	Asn	Asn 420	Gly	Val	Val	Asp	·Lys 425	Ser	Leu	Phe	Ser	Asn 430	Val	Va]
		435	_				440					445	Leu		
	450					455					460		Cys		
465		_			470	_				475			Ser		480
	_		_	485		_	_		490				Trp	495	
			500	•				505					Val 510		
		515					520					525	Thr		
Glu	Asp 530	Glu	Asp	Leu	Ile	Lys 535	Trp	Lys	Ala	Leu	Phe 540	Glu	Glu	Val	Pro
545					550			_		555			Lys		560
Glu	Val	Ser	Ile	Ser	Ser	Asp	Ala	Phe	Phe	Pro	Phe	Arg	Asp	Asn	Val

1245

565 570 575

Asp Arg Ala Lys Arg Ser Gly Val Ala Tyr Ile Ala Ala Pro Pro Val 580 585 590

Leu Leu Leu Thr Lys Leu 595

<210> 1219

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1219

Tyr Thr Ala Ile Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met

1 5 10 15

Ala Met Lys Gly Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Phe 20 25 30

Gly Ile Gln Ala Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro 35 40 45

Met Gly Asp Arg Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val 50 55 60

Gln Thr Val Ala Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu 65 70 75 80

Lys Glu Gly Arg Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala 85 90 95

Asn Leu Leu Tyr Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val

Ile Ala Gly Leu Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu 115 120 125

Asp Leu Ile Gly Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly 130 135 140

Thr Cys Ala Glu Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro 145 150 155 160

Asn Met Asp Pro Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu 165 170 175

Asn Ala Val Asp Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His 180 185 190

Ile Ile Glu Lys Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met
195 200 205

Asp

<210> 1220

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1220

Ile Ile Ser Ile Ile Ser Thr Ser Asn Lys Ile Lys Met Ser Glu Ala 1 5 10 15

Pro Arg Phe Phe Val Gly Pro Glu Asp Thr Glu Ile Asn Pro Gly Asn 20 25 30

Tyr Arg His Phe His His Ala Asp Glu Asp Asp Glu Glu Glu Asp 35 40 45

Asp Ser Xaa Pro Glu Arg Gln Ile Val Val Gly Ile Cys Ser Met Xaa 50 55 60

Lys Lys Ser Lys Ser Lys Pro Met Lys Glu Ile Leu Xaa Arg Ile Ser 65 70 75 80

Leu Phe Lys Tyr Ile Thr Val Val Val Phe Glu Glu Glu Val Ile Leu 85 90 95

Asn Glu Pro Val Glu Asn Trp Pro Leu Cys Asp Cys Leu Ile Ser Phe 100 105 110

1247

His Ser Lys Gly Phe Pro Leu Asp Lys Ala Val Ala Tyr Ala Lys Leu 115 120 125

Arg Asn Pro Phe Val Ile Asn Asp Leu Asn Met Gln 130 135 140

<210> 1221

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1221

Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met
1 5 10 15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile
20 25 30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val
35 40 45

<210> 1222

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1222

Val Ala Tyr Ile Cys Tyr Ser Lys Phe Cys Lys Tyr Ala Asn Gln Leu 1 10 15

Tyr Arg Phe Ile Thr Ser Phe Leu Gly Phe Phe Trp Gly Arg Val Ile
20 25 30

Ile Leu Leu Lys Ile Thr Met Asn Thr Leu Thr Val Arg Ile Cys Gly 35 40 45

Lys Val Pro Leu Asn Ile Thr Lys Ile Ile Ser Leu Glu Gly Arg Asn 50 55 60

Asn His Ser Asn Glu Leu 65 70

<210> 1223

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1223

Phe Tyr Pro Ser Thr Tyr Leu Lys Ala Pro Ser Ser Leu Val Cys Gly
1 5 10 15

Val Leu Glu Pro Val Ser Ser Phe Trp Arg Phe Lys Leu Asn Ser Asn 20 25 30

Asn Tyr Val Thr Gln Ser Met Trp Arg Lys Ser Glu Thr Ser His Gly
35 40 45

Asp Ala Gly Pro Arg Ala Arg Pro Ala Val Trp Pro Ala Leu Leu Thr
50 55 60

Ser Val Ser Arg Ser Phe Pro Ser His Glu Val Pro Ser Gly His Gly 65 70 75 80

Asp Glu Gly Arg Glu Gly Thr Gly 85

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<210> 1224

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (279)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224

Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
1 5 10 15

Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn 20 25 30

Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr

Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu 50 55 60

Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile 65 70 75 80

Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile 85 90 95

1249

Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys
100 105 110

Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu
115 120 125

Clar Clar War Val War Van Van Dan Clar Dan Val Tla Iva Mbr Clar Clar

Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly 130 135 140

Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met 145 150 155 160

Ala Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile 165 170 175

Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn 180 185 190

Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly
195 200 205

His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile 210 215 220

Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu 225 230 235 240

Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr 245 250 255

Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu 260 265 270

Leu His Leu Lys Lys Leu Xaa Lys Glu Gly Lys Ile Phe Ser Asn Thr 275 280 285

Asp Pro Asp Lys Lys Trp Lys Ala His Leu 290 295

<210> 1225

<211> 27

<212> PRT

<213> Homo sapiens

<400> 1225

Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Asp Gly Pro 1 5 10 15

Pro Gln Ser Pro Pro Asn Ile Tyr Tyr Lys Val 20 25

<210> 1226 <211> 380 <212> PRT

<213> Homo sapiens

<400> 1226

Glu Gln Glu Leu Asp Thr Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp

1 5 10 15

Lys Glu Asp Leu Ala Thr Phe Ile Glu Glu Leu Glu Ala Val Glu Ala 20 25 30

Lys Glu Lys Gln Asp Glu Gln Val Gly Leu Pro Gly Lys Val Gly Lys
35 40 45

Ala Lys Gly Lys Lys Thr Gln Met Ala Glu Val Leu Pro Ser Pro Arg
50 55 60

Gly Gln Arg Val Ile Pro Arg Ile Thr Ile Glu Met Lys Ala Glu Ala 65 70 75 80

Glu Lys Lys Asn Lys Lys Ile Lys Asn Glu-Asn Thr Glu Gly Ser 85 90 95

Pro Gln Glu Asp Gly Val Glu Leu Glu Gly Leu Lys Gln Arg Leu Glu
100 105 110

Lys Lys Gln Lys Arg Glu Pro Gly Thr Lys Thr Lys Lys Gln Thr Thr 115 120 125

Leu Ala Phe Lys Pro Ile Lys Lys Gly Lys Lys Arg Asn Pro Trp Ser 130 135 140

Asp Ser Glu Ser Asp Arg Ser Ser Asp Glu Ser Asn Phe Asp Val Pro 145 150 155 160

Pro Arg Glu Thr Glu Pro Arg Arg Ala Ala Thr Lys Thr Lys Phe Thr 165 170 175

Met Asp Leu Asp Ser Asp Glu Asp Phe Ser Asp Phe Asp Glu Lys Thr 180 185 190

Asp Asp Glu Asp Phe Val Pro Ser Asp Ala Ser Pro Pro Lys Thr Lys 195 200 205

Thr Ser Pro Lys Leu Ser Asn Lys Glu Leu Lys Pro Gln Lys Ser Val

PCT/US00/05882 WO 00/55350

1251

210 215 220 Val Ser Asp Leu Glu Ala Asp Asp Val Lys Gly Ser Val Pro Leu Ser 235 230 Ser Ser Pro Pro Ala Thr His Phe Pro Asp Glu Thr Glu Ile Thr Asn 250 245 Pro Val Pro Lys Lys Asn Val Thr Val Lys Lys Thr Ala Ala Lys Ser 265 260 Gln Ser Ser Thr Ser Thr Thr Gly Ala Lys Lys Arg Ala Ala Pro Lys 280 Gly Thr Lys Arg Asp Pro Ala Leu Asn Ser Gly Val Ser Gln Lys Pro 295 Asp Pro Ala Lys Thr Lys Asn Arg Arg Lys Arg Lys Pro Ser Thr Ser 305 310 Asp Asp Ser Asp Ser Asn Phe Glu Lys Ile Val Ser Lys Ala Val Thr 330 325 Ser Lys Lys Ser Lys Gly Glu Ser Asp Asp Phe His Met Asp Phe Asp 345 Ser Ala Val Ala Pro Arg Ala Lys Ser Val Arg Ala Lys Lys Pro Ile 355 360 Lys Tyr Leu Glu Glu Ser Asp Glu Asp Asp Leu Phe 375 370 <210> 1227 <211> 78 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids

Phe Asn Ser Leu Lys Cys Leu Phe Gly Ile Met Ile Gly Asn Leu Asp

Glu Phe Arg Gly Lys Lys Leu Ser Ala Xaa Met Leu Arg Ala His Leu 25

<400> 1227

Ser Pro His Thr Pro Thr Glu Leu Thr Gly Leu Gln Cys Phe Ile Arg 35 40 45

Lys Phe Pro Ile Pro Leu Ser Cys Val Phe Met Leu Lys Ile Leu Leu 50 55 60

His Phe Ser Phe Glu Cys Gln Phe Leu Thr Ser Thr Ile Ser 65 70 75

<210> 1228

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228

Ala Asn Glu Lys Val Ala Leu Gln Lys Ala Leu Leu Tyr Tyr Glu Ser 1 5 10 . 15

Ile His Gly Arg Pro Val Thr Lys Asn Glu Arg Gln Val Met Lys Pro
20 25 30

Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln Ile Leu Ser Arg Ala Asn
35 40 45

Thr Ile Pro Ile Ile Gly Ser Pro Ser Ser Lys Arg Arg Ser Pro Leu
50 60

Leu Gln Pro Ile Ile Glu Gly Glu Thr Ala Ser Phe Phe Lys Glu Ile 65 70 75 80

Lys Glu Glu Glu Gly Ser Glu Asp Asp Ser Asn Val Lys Pro Asp 85 90 95

Phe Met Val Thr Leu Lys Thr Asp Phe Ser Ala Arg Cys Phe Leu Asp 100 105 110

Gln Phe Glu Asp Asp Ala Asp Gly Phe Ile Ser Pro Met Asp Asp Lys 115 120 125

Ile Pro Ser Lys Cys Ser Gln Asp Thr Gly Leu Ser Asn Xaa His Ala 130 135 140

Ala Ser Ile Pro Glu Leu Leu Glu His Leu Gln Glu Met Arg Glu Glu 145 150 155 160

Lys Lys Arg Ile Arg Lys Lys Leu Arg Asp Phe Glu Asp Asn Phe Phe 165 170 175

Arg Gln Asn Gly Arg Asn Val Gln Lys Glu Asp Arg Thr Pro Met Ala 180 185 190

Glu Glu Tyr Ser Glu Tyr Lys His Ile Lys Ala Lys Leu Arg Leu Leu 195 200 205

Glu Val Leu Ile Ser Lys Arg Asp Thr Asp Ser Lys Ser Met 210 215 220

<210> 1229

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1229

Lys Gly Ser Thr Leu Gly His Leu Cys Thr Ala Met Ala Gly Met Met

1 10 15

Lys Gly Ile Arg Trp Ser Cys Pro Ala Ile Ala Ser Ile Ser Gln Thr

Arg Ser Ser Gln Glu Lys Asp Ser Ser Ser Pro Pro Trp Asp Leu Arg
35 40 45

Arg Ala Ala Thr Glu Gly Glu Ala Pro Asp Ala Leu Cys Gln Ser Gln 50 55 60

Val Arg Gly Gln Ser Ser Pro Cys His Pro Trp Cys Arg Pro Ala Pro 65 70 75 80

Ser Ser Phe Met Pro Gly Pro Ala Gly Thr Pro Ala Thr Thr Glu Ser 85 90 95

Thr Arg Ser Ala Leu Cys Ser Trp Arg Arg His Ser Arg Val Glu Ser
100 105 110

Cys Pro Ser Leu Ser Leu Gly His Leu Gly Gly Glu Ser Gly Leu Arg 115 120 125

Ser Glu Leu Asp Pro Gly Asp Leu Gly Ser Phe Phe Leu Ala His Gln 130 135 140

Pro Cys Arg Pro His Leu Ser Gln Asn Pro Leu Cys Leu Gly Gly Ser 145 150 155 160

1254

Gly Ser Ala Leu Leu Cys Ser Arg Arg Leu Gly Ser Gly Gln His Gln 170 Val Gly Lys Trp Ser Pro Pro Ser Cys Phe Cys Arg Ile Leu Thr Val 185 180 Gly Leu Glu Glu Lys Ser Ile Asp Leu Ile Ser Pro Thr His Pro 195 200 Ser Phe Ser Phe Phe His His Ser Pro Pro Gln Leu 210 215 220 <210> 1230 <211> 183 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (.12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1230 Glu Leu Lys Arg Leu Thr Ile Gly Lys Asn Xaa Xaa Arg Leu Thr Gly Asn Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Glu Xaa Glu Val 25 Glu Glu Glu Gly Asp Val Asp Ser Asp Glu Glu Glu Glu Asp Glu 40 35 Glu Ser Ser Glu Gly Leu Glu Ala Glu Asp Trp Ala Gln Gly Val 60 55 50

Val Glu Ala Gly Gly Ser Phe Gly Ala Tyr Gly Ala Gln Glu Glu Ala 65 70 75 80

Gln Cys Pro Thr Leu His Phe Leu Glu Gly Glu Asp Ser Asp Ser 85 90 95

Asp Ser Glu Glu Glu Asp Asp Glu Glu Glu Asp Asp Glu Asp Glu Asp 100 105 110

Asp Asp Asp Glu Glu Asp Gly Asp Glu Val Pro Val Pro Ser Phe
115 120 125

Gly Glu Ala Met Ala Tyr Phe Ala Met Val Lys Arg Tyr Leu Thr Ser 130 135 140

Phe Pro Ile Asp Asp Arg Val Gln Ser His Ile Leu His Leu Glu His 145 · 150 155 160

Asp Leu Val His Val Thr Arg Lys Asn His Ala Arg Gln Ala Gly Val 165 170 175

Arg Gly Leu Gly His Gln Ser 180

<210> 1231

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1231

Asn Leu Tyr Lys Leu Lys Leu Asn His Glu Leu Gln Lys Lys Ser Ile 1 5 10 15

Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val 20 25 30

Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn 35 40 45

Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu 50 55

<210> 1232

<211> 135

<212> PRT

<213> Homo sapiens

PCT/US00/05882

1256

WO 00/55350

<400> 1232 Gly Ser Thr His Ala Ser Gly Pro Pro Gln Ala Pro Gln Leu Ile Tyr Gln Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro 25 Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln 70 75 Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala 85 90 Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala 105 Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr 120 Leu Gly Leu Asp Val Pro Val 130 <210> 1233 <211> 134 <212> PRT <213> Homo sapiens Arg Gly Glu Thr Arg Glu Met Ala Gly Asn Leu Leu Ser Gly Ala Gly Arg Arg Leu Trp Asp Trp Val Pro Leu Ala Cys Arg Ser Phe Ser Leu

Arg Gly Pro Ile Trp Leu Arg Gly Trp Lys Gly Asn Glu Leu Gln Arg 85 90 95

Cys Ile Arg Lys Arg Lys Met Val Gly Ser Arg Met Phe Ala Asp Asp 100 105 110

Leu His Asn Leu Asn Lys Arg Ile Arg Tyr Leu Tyr Lys His Phe Asn 115 120 125

Arg His Gly Lys Phe Arg 130

<210> 1234

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234

Thr Gly Pro Glu Phe Pro Gly Xaa Pro Thr Arg Pro Arg Thr Ala Ala 1 5 10 15

Ala Xaa Ser Ala Arg Thr Arg Thr Arg Gly Ser Pro Arg Met Gly Glu 20 25 30

Phe Asn Glu Lys Lys Thr Thr Cys Gly Thr Val Cys Leu Lys Tyr Leu 35 40 45

Leu Phe Thr Tyr Asn Cys Cys Phe Trp Leu Ala Gly Leu Ala Val Met 50 55 60

Ala Val Gly Ile Trp Thr Leu Ala Leu Lys Ser Asp Tyr Ile Ser Leu 65 70 75 80

Leu Ala Ser Gly Thr Tyr Leu Ala Thr Ala Tyr Ile Leu Val Val Ala 85 90 95

Gly Thr Val Val Met Val Thr Gly Val Leu Gly Cys Cys Ala Thr Phe 100 105 110

Lys Glu Arg Arg Asn Leu Leu Arg Leu Tyr Phe Ile Leu Leu Leu Ile 115 120 Ile Phe Leu Leu Glu Ile Ile Ala Gly Ile Leu Ala Tyr Ala Tyr Tyr 135 Gln Gln Leu Asn Thr Glu Leu Lys Glu Asn Leu Lys Asp Thr Met Thr 155 Lys Arg Tyr His Gln Pro Gly His Glu Ala Val Thr Ser Ala Val Asp. Gln Leu Gln Glu Phe His Cys Cys Gly Ser Asn Asn Ser Gln Asp 180 185 Trp Arg Asp Ser Glu Trp Ile Arg Ser Gln Glu Ala Gly Gly Arg Val 2**0**0 Val Pro Asp Ser Cys Cys Lys Thr Val Val Ala Leu Cys Gly Gln Arg 210 215 Asp His Ala Ser Asn Ile Tyr Lys Val Glu Gly Gly Cys Ile Thr Lys Leu Glu Thr Phe Ile Gln Glu His Leu Arg Val Ile Gly Ala Val Gly 245 2.50 Ile Gly Ile Ala Cys Val Gln Val Phe Gly Met Ile Phe Thr Cys Cys 260 265 Leu Tyr Arg Ser Leu Lys Leu Glu His Tyr 275

<210> 1235 <211> 66 <212> PRT

<213> Homo sapiens

<400> 1235

Ala Glu Ile Gln Val Phe Gln Val Gly Leu Val Ser Trp Gly Leu Tyr
1 5 10 15

Asn Pro Cys Leu Gly Ser Ala Asp Lys Asn Ser Arg Lys Arg Ala Pro
20 25 30

Arg Ser Lys Val Pro Pro Pro Arg Asp Phe His Ile Asn Leu Phe Arg

1259

Met Gln Pro Trp Leu Arg Gln His Leu Gly Asp Val Leu Asn Phe Leu 50 55 60

Pro Leu

65

<210> 1236

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1236

Ala Arg Arg Arg Gly Gly Trp Ala Gly Gly Gly Gly Thr Arg

1 5 10 15

Arg Ala Leu Gly Val Pro Val Ala Arg Arg Arg Met Trp Arg Ala
20 25 30

Glu Gly Lys Trp Leu Pro Lys Thr Ser Arg Lys Ser Val Ser Gln Ser 35 40 45

Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val Pro Pro 50 55 60

Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val Lys Ile Phe
65 70 75 80

Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys Ser Ser Leu Pro 85 90 95

Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg Ser 100 105

<210> 1237

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1237

Arg Gly Gly Ser Lys Gly Asn Glu Val Arg Pro Val Ala Gly Ser
1 5 10 15

Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln
20 25 30

Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val 35 40 45

PCT/US00/05882

Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr 50

Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro 70 75

Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr 90

Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys

Pro Leu Met Asn 115

WO 00/55350

<210> 1238

<211> 311

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1238

Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa

Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys 25

Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val 35

Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu

Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln 75 70

Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro 85

Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His 105

Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met

1261

115 120 125 Gly Val Asp Lys Ile Ile Pro Val Asp Lys Leu Val Lys Gly Lys Phe 135 Gln Asp Asn Phe Glu Phe Val Gln Trp Phe Lys Lys Phe Phe Asp Ala 155 150 Asn Tyr Asp Gly Lys Asp Tyr Asp Pro Val Ala Ala Arg Gln Gly Gln 170 Glu Thr Ala Val Ala Pro Ser Leu Val Ala Pro Ala Leu Asn Lys Pro 185 Lys Lys Pro Leu Thr Ser Ser Ser Ala Ala Pro Gln Arg Pro Ile Ser 200 195 Thr Gln Arg Thr Ala Ala Ala Pro Lys Ala Gly Pro Gly Val Val Arg 210 215 Lys Asn Pro Gly Val Gly Asn Gly Asp Asp Glu Ala Ala Glu Leu Met 225 230 235 Gln Gln Val Asn Val Leu Lys Leu Thr Val Glu Asp Leu Glu Lys Glu 250 Arg Asp Phe Tyr Phe Gly Lys Leu Arg Asn Ile Glu Leu Ile Cys Gln 270 · Glu Asn Glu Gly Glu Asn Asp Pro Val Leu Gln Arg Ile Val Asp Ile 280 Leu Tyr Ala Thr Asp Glu Gly Phe Val Ile Pro Asp Glu Gly Gly Pro 295 Gln Glu Glu Glu Glu Tyr 305 310

<210> 1239

<211> 345

<212> PRT

<213> Homo sapiens

<400> 1239

Ala Ala Arg Leu Ala Val Glu Met Lys Thr Asp Leu Leu Ile Val Leu 1 5 10 15

Ser Asp Val Glu Gly Leu Phe Asp S r Pro Pro Gly S r Asp Asp Ala 20 25 30

WO 00/55350

Lys	Leu	Ile 35	Asp	Ile	Phe	Tyr	Pro 40	Gly	Asp	Gln	Gln	Ser 45	Val	Thr	Phe
Gly	Thr 50	_	Ser	Arg	Val	Gly 55	Иet	Gly	Gly	Met	Glu 60	Ala	Lys	Val	Lys
Ala 65	Ala	Leu	Trp	Ala	Leu 70	Gln	Gly	Gly	Thr	Ser 75	Val	Val	Ile	Ala	Ası 80
Gly	Thr	His	Pro	Lys 85	Val	Ser	Gly	His	Val 90	Ile	Thr	Asp	Ile	Val 95	Glu
Gly	Lys	Lys	Val 100	Gly	Thr	Phe	Phe	Ser 105	Glu	Val	Lys	Pro	Ala 110	Gly	Pro
Thr	Val	Glu 115	Gln	Gln	Gly	Glu	неt 120	Ala	Arg	Ser	Gly	Gly 125	Arg	Met	Lev
Ala	Thr 130	Leu	Glu	Pro	Glu	Gln 135	Arg	Ala	Glu	Ile	Ile 140	His	His	Leu	Ala
145					150					155			Asn		160
				165					170				Leu	175	
			180					185				٠	Gly 190		
		195					200					205	Leu		
	210					215					220		Val		
225					230					235			Leu		240
Val	Ala	Ala	Leu	Ala 245	Ile	Ala	Ser	Gly	Asn 250	Gly	Leu	Leu	Leu	Lys 255	Gly
_			260					265					Leu 270		
		275					280					285	Leu		
hr	Arg 290	Glu	Glu	Val		Asp 295	Leu	Суз	Arg	Leu	Asp 300	Lys	Met	Ile	Asp

WO 00/55350 PCT/US00/05882

Leu Ile Ile Pro Arg Gly Ser Ser Gln Leu Val Arg Asp Ile Gln Lys 305 310 315 320

Ala Ala Lys Gly Ile Pro Val Met Gly His Ser Glu Gly Ile Cys Ala 325 330 335

His Val Cys Gly Phe Arg Gly Gln Cys 340 345

<210> 1240

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1240

Gly Tyr Cys Phe Ile Ser Thr Ser Arg Thr Pro Lys Glu Thr Ile Trp

1 10 15

Val Lys Ala Thr Ser Thr Ala Leu Ala Leu His Arg Phe Leu Glu Phe 20 25 30

Leu Ser Phe Thr Phe Ser Leu Thr Gln His Cys Leu Leu Phe Val Phe
35 40 45

Val Ala Trp Phe Val Phe Phe Leu Pro Cys Ser Pro Asn Leu Cys Pro 50 55 60

Asn Ser Phe Gly Leu Met Gln Lys Tyr Leu Cys Gly Arg Glu Glu Leu 65 70 75 80

Phe Ser Trp Arg Ala Phe Arg

<210> 1241

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1241

Arg Ala Gly Ser Pro Ala Ser Pro Ala His Val Ala Trp Pro Pro Ala 1 5 10 15

Pro Thr Trp Ser Arg Ala Leu Pro Arg Val Ala Pro Arg Ser Ser Ser 20 25 30

Arg Arg Gly Arg Arg Tyr Pr Glu Arg Ser Gln Arg Arg Arg Glu Val

1264

35 40 45 Ala Ala Thr Ala Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg Arg Arg Gly Lys Asn Glu Asn Glu Ser Glu Lys Arg Glu Leu Val Phe Lys Glu Asp Gly Gln Glu Tyr Ala Gln Val Ile Lys Met Leu Gly Asn 85 90 Gly Arg Leu Glu Ala Met Cys Phe Asp Gly Val Lys Arg Leu Cys His 100 105 Ile Arg Gly Lys Leu Arg Lys Lys Val Trp Ile Asn Thr Ser Asp Ile Ile Leu Val Gly Leu Arg Asp Tyr Gln Asp Asn Lys Ala Asp Val Ile 130 135 Leu Lys Tyr Asn Ala Asp Glu Ala Arg Ser Leu Lys Ala Tyr Gly Glu 150 Leu Pro Glu His Ala Lys Ile Asn Glu Thr Asp Thr Phe Gly Pro Gly 165 170 Asp Asp Asp Glu Ile Gln Phe Asp Asp Ile Gly Asp Asp Asp Glu Asp 190 180 185 Ile Asp Asp Ile 195 <210> 1242 <211> 218

<211> 218
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1242
Ala Val Xaa Phe Lys Asp Xaa Ile Tyr Glu Ile Phe Gln Lys Leu Asn

1265

15 1 10 Thr Ser Ile Gln Val Val Leu Leu Ser Ala Thr Met Pro Thr Asp Val 25 Leu Glu Val Thr Lys Lys Phe Met Arg Asp Pro Ile Arg Ile Leu Val Lys Lys Glu Glu Leu Thr Leu Glu Gly Ile Lys Gln Phe Tyr Ile Asn 55 50 Val Glu Arg Glu Glu Trp Lys Leu Asp Thr Leu Cys Asp Leu Tyr Glu 70 Thr Leu Thr Ile Thr Gln Ala Val Ile Phe Leu Asn Thr Arg Arg Lys 90 Val Asp Trp Leu Thr Glu Lys Met His Ala Arg Asp Phe Thr Val Ser Ala Leu His Gly Asp Met Asp Gln Lys Glu Arg Asp Val Ile Met Arg Glu Phe Arg Ser Gly Ser Ser Arg Val Leu Ile Thr Thr Asp Leu Leu 135 Ala Arg Gly Ile Asp Val Gln Gln Val Ser Leu Val Ile Asn Tyr Asp 145 150 Leu Pro Thr Asn Arg Glu Asn Tyr Ile His Arg Ile Gly Arg Gly Gly 170 Arg Phe Gly Arg Lys Gly Val Ala Ile Asn Phe Val Thr Glu Glu Asp 185 Lys Arg Ile Leu Arg Asp Ile Glu Thr Phe Tyr Asn Thr Thr Val Glu 195 200 Glu Met Pro Met Asn Val Ala Asp Leu Ile 215 210

<210> 1243

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1243

Leu Asp Gly Ser Ala Arg Ala Glu Leu Ala Leu Ser Val Ala Val Asn
1 5 10 15

PCT/US00/05882 WO 00/55350

1266

Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln 20 Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val 40 45 Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile Glu Thr Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys 70 75 Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile 85 Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile 105 Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr 120 125 115 Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met 135 Arg Gln Gly Glu Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val 150 155 Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Ser Pro 165 <210> 1244

<211> 222

<212> PRT

<213> Homo sapiens

<220>

. <221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72) .

<223> Xaa equals any of the naturally occurring L-amino acids

Tyr Ile Lys Il Tyr Gln Gly Glu Glu Leu Pro His Pro Lys Ser Met 10

1267

Xaa Gln Ala Thr Ala Glu Ala Asn Asn Leu Ala Ala Val Ala Thr Ala 20 Lys Asp Thr Tyr Asn Lys Lys Met Glu Glu Ile Cys Gly Gly Asp Lys 35 40 Pro Phe Leu Ala Pro Asn Asp Leu Gln Thr Lys His Leu Gln Leu Lys Glu Glu Ser Val Lys Leu Phe Xaa Gly Val Lys Lys Met Gly Glu Glu 75 Glu Phe Ser Arg Arg Tyr Leu Gln Gln Leu Glu Ser Glu Ile Asp Glu 85 Leu Tyr Ile Gln Tyr Ile Lys His Asn Asp Ser Lys Asn Ile Phe His 105 Ala Ala Arg Thr Pro Ala Thr Leu Phe Val Val Ile Phe Ile Thr Tyr 120 115 Val Ile Ala Gly Val Thr Gly Phe Ile Gly Leu Asp Ile Ile Ala Ser 135 Leu Cys Asn Met Ile Met Gly Leu Thr Leu Ile Thr Leu Cys Thr Trp 150 1.55 Ala Tyr Ile Arg Tyr Ser Gly Glu Tyr Arg Glu Leu Gly Ala Val Ile 165 170 Asp Gln Val Ala Ala Ala Leu Trp Asp Gln Ala Leu Tyr Lys Leu Tyr 185 Ser Ala Ala Ala Thr His Arg His Leu Tyr His Gln Ala Phe Pro Thr 200 Pro Lys Ser Glu Ser Thr Glu Gln Ser Glu Lys Lys Met

<210> 1245

210

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1245

Ser Ala Glu Asp Val Glu Phe Gln Lys Glu Val Ala Gln Val Arg Lys
1 5 10 15

220

- Arg Ile Thr Gln Arg Lys Lys Gln Glu Gln Leu Thr Pro Gly Val Val 25 Tyr Val Arg His Leu Pro Asn Leu Leu Asp Glu Thr Gln Ile Phe Ser 40 Tyr Phe Ser Gln Phe Gly Thr Val Thr Arg Phe Arg Leu Ser Arg Ser Lys Arg Thr Gly Asn Ser Lys Gly Tyr Ala Phe Val Glu Phe Glu Ser Glu Asp Val Ala Lys Ile Val Ala Glu Thr Met Asn Asn Tyr Leu Phe Gly Glu Arg Leu Leu Glu Cys His Phe Met Pro Pro Glu Lys Val His 105 Lys Glu Leu Phe Lys Asp Trp Asn Ile Pro Phe Lys Gln Pro Ser Tyr 120 Pro Ser Val Lys Arg Tyr Asn Arg Asn Arg Thr Leu Thr Gln Lys Leu 135 Arg Met Glu Glu Arg Phe Lys Lys Glu Arg Leu Leu Arg Lys 145 150 155 Leu Ala Lys Lys Gly Ile Asp Tyr Asp Phe Pro Ser Leu Ile Leu Gln Lys Thr Glu Ser Ile Ser Lys Thr Asn Arg Gln Thr Ser Thr Lys Gly 185 Gln Val Leu Arg Lys Lys Lys Lys Val Ser Gly Thr Leu Asp Thr 195 200 Pro Glu Lys Thr Val Asp Ser Gln Gly Pro Thr Pro Val Cys Thr Pro 215 Thr Phe Leu Glu Arg Arg Lys Ser Gln Val Ala Glu Leu Asn Asp Asp 225 235 230 Asp Lys Asp Asp Glu Ile Val Phe Lys Gln Pro Ile Ser Cys Val Lys 245 Glu Glu Ile Gln Glu Thr Gln Thr Pro Thr His Ser Arg Lys Lys Arg 265
- Arg Arg Ser Ser Asn Gln 275

1269

<210> 1246 <211> 121 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (100) <223> Xaa equals any of the naturally occurring L-amino acids Ser Pro Pro Pro Leu Ser Leu Ile Leu Leu Ser Pro Ile Lys Ala Lys 5 10 Tyr Gly Leu Thr Thr Ser Pro Lys Ser Val Leu Arg Pro Ser Leu Cys Leu Cys Ala Leu Leu Gly Val Ser Gln Arg Ser Gly Gln Asp Cys Ala 40 Gly Pro Ala Ser Pro Cys Ala Ser Gln Glu His Arg Gln Gly Val Leu Val Ala Val Ala Gly His Leu Ser Pro Ser Ser Leu Leu Asn Val Leu 75 70 Thr Ala Arg Gly Asn Gly Val Ser Phe Pro Thr Lys Lys Pro Leu Leu Tyr Ile Phe Xaa Leu Gln Ser His Arg Leu Gln Thr Thr Leu Leu Phe 110 . 100 105 Phe Met Asp Phe Ser Ala His Phe Arg 115

<210> 1247

<211> 36

<212> PRT

<213> Homo sapiens

<400> 1247

Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro 1 5 10 15

Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu 20 25 30

Ala Phe Ser Ser 35

<210> 1248

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1248

Trp Ile Pro Arg Ala Cys Arg Glu Phe Gly Thr Arg Phe Gly Gly Val

Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys Ser Gly 20 25 30

Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp Cys Lys 35 40 45

Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys Lys 50 55 60

Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys Ala Ala 65 70 75 80

Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys Arg Arg 85 90 95

Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr Ile Asp 100 105 110

Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala Lys Phe 115 120 125

Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val Gln Asp 130 135 140

Ile Lys Glu Val Lys Gln Asn Ile His Leu Ile Arg Ala Pro Leu Ala 145 150 155 160

Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu Gln Glu 165 170 175

Asp Val Asp Met Glu Asp Ala Pro 180

<210> 1249

<211> 188

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1249

Gly Cys Pro Ala His Ser Pro Gly Ser Ala Lys Arg Trp Thr Gln Ala 1 5 10 15

Ala Met Ser Arg Pro Arg Met Arg Leu Val Val Thr Ala Asp Asp Phe 20 25 30

Gly Tyr Cys Pro Arg Arg Asp Glu Gly Ile Val Glu Ala Phe Leu Ala 35 40 45

Gly Ala Val Thr Ser Val Ser Leu Leu Val Asn Gly Ala Ala Thr Glu
50 60

Ser Ala Ala Glu Leu Ala Arg Arg His Ser Ile Pro Thr Gly Leu His
65 70 75 80

Ala Asn Leu Ser Glu Gly Arg Pro Val Gly Pro Ala Arg Arg Gly Ala 85 90 95

Ser Ser Leu Gly Pro Glu Xaa Phe Phe Leu Gly Lys Met Gly Phe 100 105 110

Arg Glu Ala Val Ala Ala Gly Asp Val Asp Leu Pro Gln Val Arg Ser 115 120 125

Arg Ser Tyr Arg Arg Met Leu Ala Arg Thr Pro Arg Ala Pro Pro Gly 130 135 140

Gly Thr Val Arg Pro Leu Glu Leu Ala Val Asp Asp Phe Arg Ile Gln 145 150 155 160

Thr Leu Glu Pro Ser His Gly Ser Thr Arg Arg Val Ser Ser Ala Ala 165 170 175

Thr Pro Gly Arg Ser Arg Cys Leu Ser Leu Ala Leu 180 185

<210> 1250

<211> 201

<212> PRT

<213> Homo sapiens

	_														
<22															
		SITE													
		(36)													
<22	3> 3	(aa e	equal	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	0>														
<22	1> 5	SITE													
<22	2> (	96)													
<22	3> }	(aa e	equal	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	0>														
<22	1> 5	SITE													
<22	2> (	97)													
<22	3> }	(aa e	equal	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	is
<22(		SITE													
		101													
			qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-ai	mino	aci	ds
<400	)> 1	250													
Arg 1	Lys	Asr	1 Leu	Glu 5	Ile	Tyr	Glu	Ala	Val 10	Thr	Ser	Pro	Gln	Gly 15	Pro
Ala	Met	Thi	Trp 20	Ser	Met	Phe	Ala	Val 25	Gly	Trp	Met	Glu	Leu 30	Lys	Asp
Ala	Суз	Gl <sub>y</sub> 35	/ Xaa	Arg	Gly	Leu	Leu 40	Asp	Arg	Ser	Phe	Ala 45	Asn	Met	Ala
Glu	Pro		. Lys	Val	Trp	Thr 55	Glu	Asn	Ala	Asp	Gly 60	Ser	Gly	Ala	Val
Asn 65	Phe	Leu	Thr	Gly	Met 70	Gly	Gly	Phe	Leu	Gln 75	Ala	Val	Val	Phe	Gly 80
Cys	Thr	Gly	Phe	Arg 85	Val	Ser	Val	Ser	Gly 90	Ile	Phe	туг	Gln	Gly 95	Xaa
Xaa	Leu	Asn	Phe 100	Xaa	Phe	Ser	Glu	Asp 105	Ser	Val	Thr	Val	Glu 110	Val	Thr
Ala	Arg	Ala	Gly	Pro	Trp	Ala	Pro 120	His	Leu	Glu	Ala	Glu 125	Leu	Trp	Pro
Ser	Gln 130		Arg	Leu	Ser	L u 135	Leu	Pro	Gly	His	Lys 140	Val	Ser	Phe	Pro
Arg 145	Ser	Ala	Gly	Arg	Ile 150	Gln	M t	Ser	Pro	Pro 155	Lys	Leu	Pro	Gly	Ser 160

PCT/US00/05882

Ser Ser Ser Glu Phe Pro Gly Arg Thr Phe Ser Asp Val Arg Asp Pro 165 170 175

Leu Gln Ser Pro Leu Trp Val Thr Leu Gly Ser Ser Ser Pro Thr Glu
180 185 190

Ser Leu Thr Val Asp Pro Ala Ser Glu 195 200

<210> 1251

WO 00/55350

<211> 266

<212> PRT "

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251: . .

Ser Val Gly Ser Val Ala Ala Thr Arg Thr Gly Pro Val Ser Xaa 1 5 10 15

Lys Lys Phe Arg Glu Ala Ser Trp Arg Phe Thr Phe Tyr Leu Ile Ala 20 25 30

Phe Ile Ala Gly Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp 35 40 45

Met Lys Lys Val Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser 50 55 60

Gln Tyr Trp Tyr Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu 65 70 75 80

Phe Ser Ile Ala Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile 85 90 95

Ile His His Val Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala 100 105 110

Asn Tyr Ile Arg Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser 115 120 125

Asp Tyr Leu Leu Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys 130 135 140

Asn Thr Cys Asn Asn Ile Phe Ile Val Phe Ala Ile Val Phe Ile Ile

150 155 160 . 145 Thr Arg Leu Val Ile Leu Pro Phe Trp Ile Leu His Cys Thr Leu Val . 170 165 Tyr Pro Leu Glu Leu Tyr Pro Ala Phe Phe Gly Tyr Tyr Phe Phe Asn 185 Ser Met Met Gly Val Leu Gln Leu Leu His Ile Phe Trp Ala Tyr Leu 200 205 195 Ile Leu Arg Met Ala His Lys Phe Ile Thr Gly Lys Leu Val Glu Asp 220 215 Glu Arg Ser Asp Arg Glu Glu Thr Glu Ser Ser Glu Gly Glu Glu Ala 230 Ala Ala Gly Gly Ala Lys Ser Arg Pro Leu Ala Asn Gly His Pro 245 Ile Leu Asn Asn Asn His Arg Lys Asn Asp 260 265 <210> 1252 <211> 163 <212> PRT <213> Homo sapiens <400> 1252 Lys Met Gly Thr Asn Lys Cys Ala Ser Gln Ala Gly Met Thr Ala Tyr 10 5 Gly Thr Arg Arg His Leu Tyr Asp Pro Lys Met Gln Thr Asp Lys Pro Phe Asp Gln Thr Thr Ile Ser Leu Gln Met Gly Thr Asn Lys Gly Ala 35 Ser Gln Ala Gly Met Leu Ala Pro Gly Thr Arg Arg Asp Ile Tyr Asp Gln Lys Leu Thr Leu Gln Pro Val Asp Asn Ser Thr Ile Ser Leu Gln 75 70 Met Gly Thr Asn Lys Val Ala Ser Gln Lys Gly Met Ser Val Tyr Gly 85 Leu Gly Arg Gln Val Tyr Asp Pro Lys Tyr Cys Ala Ala Pro Thr Glu 110 100 105

Pro Val Ile His Asn Gly Ser Gln Gly Thr Gly Thr Asn Gly Ser Glu
115 120 125

Ile Ser Asp Ser Asp Tyr Gln Ala Glu Tyr Pro Asp Glu Tyr His Gly
130 135 140

Glu Tyr Gln Asp Asp Tyr Pro Arg Asp Tyr Gln Tyr Ser Asp Gln Gly
145 150 155 160

Ile Asp Tyr

<210> 1253

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (109)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1253

Leu Glu Glu Thr Pro Cys Leu Arg Thr Ala Val Ala Cys Glu Gln Arg
1 5 10 15

Asp Pro Gly Thr Glu Ser Gln Pro Arg Arg Cys Cys Arg Arg Arg Arg 20 25 30

Pro Glu Thr Ala Glu Pro Val Arg Pro Pro Pro Pro Pro Thr Pro Asp 35 40 45

Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys Ala Lys 50 55 60

Leu Ala Glu Gln Ala Glu Arg Tyr Asp Asp Met Ala Ala Cys Met Lys 65 70 75 80

Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn Leu 85 90. 95

Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Xaa Ser Ser Trp 100 105 110

Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys Lys
115 120 125

Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu Arg

1276

140 130 135 Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile Pro 155 150 Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Lys Met Lys Gly 170 Asp Tyr Tyr Arg Tyr Leu Ala Glu Val Ala Ala Gly Asp Asp Lys Lys 185 180 Gly Ile Val Asp Gln Ser Gln Gln Ala Tyr Gln Glu Ala Phe Glu Ile 200 Ser Lys Lys Glu Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala 215 Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu Asn Ser Pro Glu Lys 225 . 230 Ala Cys Ser Leu Ala Lys Thr Ala Phe Asp Glu Ala Ile Ala Glu Leu 250 Asp Thr Leu Ser Glu Glu Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln 265 Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr Ser Asp Thr Gln Gly Asp 275 280 Glu Ala Glu Ala Gly Glu Gly Glu Asn 295 290 <210> 1254 <211> 173 <212> PRT <213> Homo sapiens Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile 10 Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly

Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala

Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val

55

60

1277

Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met Phe Thr Asn Gln Gly
65 70 75 80

Thr Val Ile His Phe Asn Asn Pro Lys Val Gln Ala Ser Leu Ala Ala 85 90 95

Asn Thr Phe Thr Ile Thr Gly His Ala Glu Thr Lys Gln Leu Thr Glu 100 105 110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser 115 120 125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys
130 135 140

Ala Pro Leu Ala Thr Gly Glu Asp Asp Asp Glu Val Pro Asp Leu 145 150 155 160

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn 165 170

<210> 1255

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1255

Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala 1 5 10 15

Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg 20 25 30

Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly.
35 40 45

Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys 50 55 60

Arg Leu

65

<210> 1256

<211> 389

<212> PRT

<213> Homo sapi ns

<400> 1256 Ala Glu Ala Gly Pro Gly Ala Arg Ala Ala Ala Met Ala Ile Lys Phe Leu Glu Val Ile Lys Pro Phe Cys Val Ile Leu Pro Glu Ile Gln 25 Lys Pro Glu Arg Lys Ile Gln Phe Lys Glu Lys Val Leu Trp Thr Ala 35 Ile Thr Leu Phe Ile Phe Leu Val Cys Cys Gln Ile Pro Leu Phe Gly Ile Met Ser Ser Asp Ser Ala Asp Pro Phe Tyr Trp Met Arg Val Ile 75 70 Leu Ala Ser Asn Arg Gly Thr Leu Met Glu Leu Gly Ile Ser Pro Ile 85 Val Thr Ser Gly Leu Ile Met Gln Leu Leu Ala Gly Ala Lys Ile Ile 105 Glu Val Gly Asp Thr Pro Lys Asp Arg Ala Leu Phe Asn Gly Ala Gln 120 Lys Leu Phe Gly Met Ile Ile Thr Ile Gly Gln Ser Ile Val Tyr Val 130 135 MetoThr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly Ala Gly Ile Cys 150 155 Leu Leu Ile Thr Ile Gln Leu Phe Val Ala Gly Leu Ile Val Leu Leu 170 Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly Ser Gly Ile Ser 185 180 Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val Trp Lys Ala Phe Ser Pro Thr Thr Val Asn Thr Gly Arg Gly Met Glu Phe Glu Gly Ala 215 Ile Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr Asp Lys Val Arg 225 230 Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro Asn Leu Met Asn 250

Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile Tyr Phe Gln Gly

1279

260 265 270 Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr Arg Gly Gln Tyr 280 Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn Ile Pro Ile Ile 295 Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile Ser Gln Met Leu 305 310 Ser Ala Arg Phe Ser Gly Asn Leu Leu Val Ser Leu Leu Gly Thr Trp 325 330 Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr Pro Val Gly Gly 345 Leu Cys Tyr Tyr Leu Ser Pro Pro Trp Ser Met Asn Ser Thr Gly Thr 355 360 Ser Pro Gln Pro Arg Pro Leu Val Gly Cys Ala Ser Gly Pro Ser Arg 375 380 Ser Trp Leu Thr Ser <210> 1257 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1257 Gly Xaa Pro Ser Ser Arg Ala His Ser Pro Met Ile Ala Val Gly 5 15 1 10 Ser Asp Asp Ser Ser Pro Asn Ala Met Ala Lys Val Gln Ile Phe Glu 20 25 Tyr Asn Glu Asn Thr Arg Lys Tyr Ala Lys Ala Glu Thr Leu Met Thr 40 Val Thr Asp Pro Val His Asp Ile Ala Phe Ala Pro Asn Leu Gly Arg 55 60

Ser Phe His Ile Leu Ala Ile Ala Thr Lys Asp Val Arg Ile Phe Thr 70 Leu Lys Pro Val Arg Lys Glu Leu Thr Ser Ser Gly Gly Pro Thr Lys 90 Phe Glu Ile His Ile Val Ala Gln Phe Asp Asn His Asn Ser Gln Val 100 Trp Arg Val Ser Trp Asn Ile Thr Gly Thr Val Leu Ala Ser Ser Gly 120 Asp Asp Gly Cys Val Arg Leu Trp Lys Ala Asn Tyr Met Asp Asn Trp 135 Lys Cys Thr Gly Ile Leu Lys Gly Asn Gly Ser Pro Val Asn Gly Ser 145 Ser Gln Gln Gly Thr Ser Asn Pro Ser Leu Gly Ser Asn Ile Pro Ser 170 Leu Gln Asn Ser Leu Asn Gly Ser Ser Ala Gly Arg Lys His Ser 180 185

- <210> 1258
 <211> 458
 <212> PRT
 <213> Homo sapiens

<400> 1258

Pro Gly Ala Arg His Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu

1 5 10 15

Val Ser Cys Glu Asn Ser Pro Ser Asp Thr Ser Ser Val Ala Val Gly
20 25 30

Cys Leu Ala Gln Asp Phe Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys 35 40 45

Tyr Lys Asn Asn Ser Asp Ile Ser Ser Thr Arg Gly Phe Pro Ser Val 50 55 60

Leu Arg Gly Gly Lys Tyr Ala Ala Thr Ser Gln Val Leu Leu Pro Ser 65 70 75 80

Lys Asp Val Met Gln Gly Thr Asp Glu His Val Val Cys Lys Val Gln 85 90 95

His Pro Asn Gly Asn Lys Glu Lys Asn Val Pro Leu Pro Val Ile Ala

Glu Leu Pro Pro Lys Val Ser Val Phe Val Pro Pro Arg Asp Gly Phe Phe Gly Asn Pro Arg Lys Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe Ser Pro Arg Gln Ile Gln Val Ser Trp Leu Arg Glu Gly Lys Gln Val Gly Ser Gly Val Thr Thr Asp Gln Val Gln Ala Glu Ala Lys Glu Ser Gly Pro Thr Thr Tyr Lys Val Thr Ser Thr Leu Thr Ile Lys Glu Ser Asp Trp Leu Ser Gln Ser Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asp Ser Val Thr Ile Ser Trp Thr Arg Gln Asn Gly Glu Ala Val Lys Thr His Thr Asn Ile Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu Arg Phe Thr Cys Thr Val Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro Lys Gly Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val Thr Gly Phe Ser Pro Ala Asp Val Phe Val Gln Trp M t Gln Arg Gly Gln Pro Leu Ser Pr Glu Lys Tyr Val Thr

1282

380 370 375 Ser Ala Pro Met Pro Glu Pro Gln Ala Pro Gly Arg Tyr Phe Ala His 390 395 Ser Ile Leu Thr Val Ser Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr 410 Thr Cys Val Val Ala His Glu Ala Leu Pro Asn Arg Val Thr Glu Arg 420 425 Thr Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu 440 Val Met Ser Asp Thr Ala Gly Thr Cys Tyr 455 <210> 1259 <211> 247 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1259 Ala Gly Pro Ala Pro Glu Glu Pro Arg Gly Gly Ala Ala Arg Trp 10 Asp Cys Gln Pro Cys Gln Ala Ala Xaa Val Val Glu Asn Ser Ala Gln 25 20 Arg Val Ile His Leu Ala Gly Gln Trp Glu Lys His Arg Val Pro Leu 40 Leu Ala Glu Tyr Arg His Leu Arg Lys Leu Gln Asp Cys Arg Glu Leu 50 60 Glu Ser Ser Arg Arg Leu Ala Glu Ile Gln Glu Leu His Gln Ser Val 65 70 Arg Ala Ala Ala Glu Glu Ala Arg Arg Lys Glu Glu Val Tyr Lys Gln

Leu Met Ser Glu Leu Glu Thr Leu Pro Arg Asp Val Ser Arg Leu Ala

105

Tyr Thr Gln Arg Ile Leu Glu Ile Val Gly Asn Ile Arg Lys Gln Lys 115 120 125

Glu Glu Ile Thr Lys Ile Leu Ser Asp Thr Lys Glu Leu Gln Lys Glu 130 135 140

Ile Asn Ser Leu Ser Gly Lys Leu Asp Arg Thr Phe Ala Val Thr Asp 145 150 155 160

Glu Leu Val Phe Lys Asp Ala Lys Lys Asp Asp Ala Val Arg Lys Ala 165 170 175

Tyr Lys Tyr Leu Ala Ala Leu His Glu Asn Cys Ser Gln Leu Ile Gln 180 185 190

Thr Ile Glu Asp Thr Gly Thr Ile Met Arg Glu Val Arg Asp Leu Glu
195 200 205

Glu Gln Ile Glu Thr Glu Leu Gly Lys Lys Thr Leu Ser Asn Leu Glu 210 215 220

Lys Ile Arg Glu Asp Tyr Arg Ala Leu Arg Gln Glu Asn Ala Gly Leu 225 230 235 240

Leu Gly Arg Val Arg Glu Ala 245

<210> 1260

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1260

Val Gly Ile Lys Trp Ile Glu Glu Ala Val Leu Cys Ala Asn Val Ser 1 5 10 15

Phe Ala Ser Asp Arg Tyr Leu Phe Val Ile Arg Arg Val Ala Ser Phe 20 25 30

His Leu Gly Ala Glu Asn Ser Arg Gln Leu Leu Thr Asp Lys Phe Asn 35 40 45

Leu His Leu Gln Tyr Cys Met Leu Gly Ile Ser Ala Tyr Phe 50 55 60

<210> 1261

<211> 243

WO 00/55350

145

PCT/US00/05882

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (210) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (226) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1261 Gln Glu Arg Pro Gly Asn Phe Tyr Val Ser Ser Glu Ser Ile Arg Lys 15 5 Gly Pro Pro Val Arg Pro Trp Arg Asp Arg Pro Gln Ser Ser Ile Tyr 20 Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu Ile Thr 40 45 Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu Ala Val 50 Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Xaa Arg Ser Glu Ser 70 Phe Arg Phe Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser Ile Thr 90 Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp Leu Glu 100 Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys Val Glu 115 120 Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro Pro Arg 135

Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser Ser Thr

Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu Ser Val

150

165

155

1285

Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val 180 185 190

Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr
195 200 205

Met Xaa Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln 210 215 220

Arg Xaa Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro 225 230 235 240

Arg Gly Arg

<210> 1262

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1262

Lys Tyr Val Arg Asn Asp Gln Asn Lys Arg Lys Phe Leu Phe Ser Cys
1 5 10 15

Lys Tyr Phe Ser Ser Val Ile Thr Leu Lys Tyr Lys Leu Lys Tyr Asn 20 25 30

Thr Pro Glu Cys Leu Arg His Asp Leu Asp Phe Lys Cys Val Val Phe 35 40 45

Ile Glu Lys Lys Leu Ser Thr His Leu Val Phe Gln Glu Asn Leu Lys 50 55 60

Arg Ser Gln Gly Lys Met Ile Cys Met Leu Lys 65 70 75

<210> 1263

<211> 475

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<40	0> 1	263													
Arg 1	Thr	Gly	Leu	Gly 5	Arg	Asp	Val	Gly	Ala 10	Gly	Ala	Arg	Arg	Ala 15	Ala
Arg	Cys	Arg	Ala 20	Glu	Ala	Ala	Ala	Ala 25	Val	Gly	Thr	Ala	Arg 30	Ser	Pro
Ala	Leu	Gly 35	Met	Ala	Leu	Leu	Val 40	Leu	Gly	Leu	Val	Ser 45	Cys	Thr	Phe
Phe	Leu 50	Ala	Val	Asn	Gly	Leu 55	Tyr	Ser	Ser	Ser	Asp 60	Asp	Val	Ile	Glu
Leu 65	Thr	Pro	Ser	Asn	Phe 70	Asn	Arg	Glu	Val	Ile 75	Gln	Ser	Asp	Ser	Let 80
Trp	Leu	Val	Glu	Phe 85	Tyr	Ala	Pro	Trp	Cys 90	Gly	His	Cys	Gln	Arg 95	Leu
Thr	Pro	Glu	Trp 100	Lys	Lys	Ala	Ala	Thr 105	Ala	Leu	Lys	Asp	Val 110	Val	Lys
Val	Gly	Ala 115		Asp	Ala	Asp	Lys 120	His	His	Ser	Leu	Gly 125	Gly	Gln	Tyr
Gly	Val 130	Gln	Gly	Phe	Pro	Thr 135	Ile	Lys	Ile	Phe	Gly 140	Ser	Asn	Lys	Asn
Arg 145	Pro	Glu	Asp	туr	Gln 150	Gly	Gly	Arg	Thr	Gly 155	Glu	Ala	Ile	Val	Asp 160
Ala	Ala	Leu	Ser	Ala 165	Leu	Arg	Gln	Leu	Val 170	Lys	Asp	Arg	Leu	Gly 175	Gly
Arg	Ser	Gly	Gly 180	Tyr	Ser	Ser	Gly	Lys 185	Gln	Gly	Arg	Ser	Asp 190	Ser	Ser
Ser	_	Lys 195	Asp	Val		Glu		Thr	Asp	Asp	Ser	Phe 205	Asp	Lys	Asn
Val	Leu 210	Asp	Ser	Glu	Asp	Val 215	Trp	Met	Val	Glu	Phe 220	Tyr	Ala	Pro	Trp
Cys 225	Gly	His	Cys	Lys	Asn 230	Leu	Glu	Pro	Glu	Trp 235	Ala	Ala	Ala	Ala	Ser 240
Glu	Val	Lys	Glu	Gln 245	Thr	Lys	Gly	Xaa	Val 250	Lys	Leu	Ala	Ala	Val 255	Asp
Ala	Thr	Val	Asn 260	Gln	Val	Leu	Ala	Ser 265	Arg	Tyr	Gly	Ile	Arg 270	Gly	Phe

Pro Thr Ile Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp 275 280 285 Gly Gly Arg Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe 295 Ser Asp Asn Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp 315 310 Ile Ala Lys Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val 325 330 Leu Pro His Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu 345 Glu Val Leu Leu Lys Leu Ala Asp Lys Tyr Lys Lys Met Trp Gly Trp Leu Trp Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu 375 370 Gly Ile Gly Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg 395 385 390 Lys Met Lys Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile 405 410 Asn Glu Phe Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro 420 Val Gly Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp 440 Gly Arg Asp Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp 455 Val Glu Leu Asp Asp Leu Gly Lys Asp Glu Leu 470 475 465

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<210> 1264
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<sup>&</sup>lt;211> 398

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> SITE

<sup>&</sup>lt;222> (28)

<sup>&</sup>lt;223> Xaa equals any of the naturally occurring L-amino acids

<400> 1264 His Phe Glu Arg Thr Ser Ser Lys Arg Val Ser Arg Ser Leu Asp Gly															
His 1	Phe	Glu	Arg	Thr 5	Ser	Ser	Lys	Arg	Val 10	Ser	Arg	Ser	Leu	Asp 15	Gly
Ala	Pro	Ile	Gly 20	Val	Met	Asp	Gln	Ser 25	Leu	Met	Xaa	Asp	Phe 30	Pro	Gly
Ala	Ala	Gly 35	Glu	Ile	Ser	Ala	Tyr 40	Gly	Pro	Gly	Leu	Val 45	Ser	Ile	Ala
Val	Val 50	Gln	Asp	Gly	Asp	Gly 55	Arg	Arg	Glu	Val	Arg 60	Ser	Pro	Thr	Lys
Ala 65	Pro	His	Leu	Gln	Leu 70	īle	Glu	Gly	Lys	Ser 75	Ser	His	Glu	Thr	Leu 80
Asn	Ile	Val	Glu	Glu 85	Lys	Lys	Arg	Ala	Glu 90	Val	Gly	Lys	Asp	Glu 95	Arg
Val	Ile	Thr	Glu 100	Glu	Met	Asn	Gly	Lys 105	Glu	Ile	Ser	Pro	Gly 110	Ser	Gly
Pro	Gly	Glu 115	Ile	Arg	Lys	Val	Glu 120	Pro	Val	Thr	Gln	Lys 125	Asp	Ser	Thr
Ser	Leu 130	Ser	-Ser	Glu	Ser	Ser 135	Ser	Ser	Ser	Ser	Glu 140	Ser	Glu	Glu	Glu
Asp 145	Val	Gly	Glu	Tyr	Arg 150	Pro	His	His	Arg	Val 155	Thr	Glu	Gly	Thr	Ile 160
Arg	Glu ,	Glu	Gln	Glu 165	Tyr	Glu	Glu	Glu	Val 170	Glu	Glu	Glu	Pro	Arg 175	Pro
Ala	Ala	Lys	Val 180	Val	Glu	Arg	Glu	Glu 185	Ala	Val	Pro	Glu	Ala 190	Ser	Pro
Val	Thr	Gln 195	Ala	Gly	Ala	Ser	Val 200	Ile	Thr	Val	Glu	Thr 205	Val	Ile	Gln
Glu	Asn 210	Val	Gly	Ala	Gln	Lys 215	Ile	Pro	Gly	Glu	Lys 220	Ser	Val	His	Glu
Gly 225	Ala	Leu	Lys	Gln	Asp 230	Met	Gly	Glu	Glu	Ala 235	Glu	Glu	Glu	Pro	Gln 240
Lys	Val	Asn	Gly	Glu 245	Val	Ser	His	Val	Asp 250	Ile	Asp	Val	Leu	Pro 255	Gln
Ile	Il	Cys	Cys	Ser	Glu	Pro	Pro	Val	Val	Lys	Thr	Glu	Met	Val	Thr

1289

265 260 270 Ile Ser Asp Ala Ser Gln Arg Thr Glu Ile Ser Thr Lys Glu Val Pro 280 Ile Val Gln Thr Glu Thr Lys Thr Ile Thr Tyr Glu Ser Pro Gln Ile 295 Asp Gly Gly Ala Gly Gly Asp Ser Gly Thr Leu Leu Thr Ala Gln Thr 310 315 Ile Thr Ser Glu Ser Val Ser Thr Thr Thr Thr His Ile Thr Lys Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile Glu Lys Arg Ile Val 345 Ile Thr Gly Asp Gly Asp Ile Asp His Asp Gln Ala Leu Ala Gln Ala 355 360 Ile Arg Glu Ala Arg Glu Gln His Pro Asp Met Ser Val Thr Arg Val 380 370 · 375 Val Val His Lys Glu Thr Glu Leu Ala Glu Glu Gly Glu Asp 390 395 <210> 1265 <211> 207 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1265 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp 1 5 Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser 20 Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys 40

Val Tyr Ser Il Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser

55

50

Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser 70 Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe 90 85 Ala Leu Xaa Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu 105 Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Thr 120 Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr 135 Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe 155 150 Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Trp Gly Ile His His Leu

<210> 1266 <211> 289 <212> PRT <213> Homo sapiens

195

Ser Arg Asp Pro Asn Gly Trp Trp Arg Arg Leu Arg Val Ser Ala Glu

200

Leu Ala Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu

Ala Leu Leu Gly Ser Leu Leu Ser Gly Val Leu Ala Ala Asp Arg

Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg 55 50

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser 70

Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr

1291

85 90 95

Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn 100 105 110

Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val

Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met 130 135 140

Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys 145 150 155 160

Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys 165 170 175

Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg 180 185 190

Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro 195 200 205

Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val 210 215 220

Met.Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr. Leu Ile Arg 225 230 235 240

Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser 245 250 255

Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu Cys Arg 260 265 270

Pro Val Ala Lys Arg Thr Gly Glu Gly Arg Gly Asp Met Cys Asp Phe 275 280 285

Phe

<210> 1267

<211> 284

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1267

Arg Gly Arg Arg Xaa Xaa Ala Ser Leu Arg Gly Trp Pro Val Arg Arg 1 5 10 15

Gly Met Gly Arg Val Gln Leu Phe Glu Ile Ser Leu Ser His Gly Arg
20 25 30

Val Val Tyr Ser Pro Gly Glu Pro Leu Ala Gly Thr Val Arg Val Arg
35 40 45

Leu Gly Ala Pro Leu Pro Phe Arg Ala Ile Arg Val Thr Cys Ile Gly
50 55 60

Ser Cys Gly Val Ser Asn Lys Ala Asn Asp Thr Ala Trp Val Val Glu 65 70 75 80

Glu Gly Tyr Phe Asn Ser Ser Leu Ser Leu Ala Asp Lys Gly Ser Leu 85 90 95

Pro Ala Gly Glu His Ser Phe Pro Phe Gln Phe Leu Leu Pro Ala Thr 100 105 110

Ala Pro Thr Ser Phe Glu Gly Pro Phe Gly Lys Ile Val His Gln Val 115 120 125

Arg Ala Ala Ile His Thr Pro Arg Phe Ser Lys Asp His Lys Cys Ser 130 135 140

Leu Val Phe Tyr Ile Leu Ser Pro Leu Asn Leu Asn Ser Ile Pro Asp 145 150 155 160

Ile Glu Gln Pro Asn Val Ala Ser Ala Thr Lys Lys Phe Ser Tyr Lys
165 · 170 175

Leu Val Lys Thr Gly Ser Val Val Leu Thr Ala Ser Thr Asp Leu Arg 180 185 190

Gly Tyr Val Val Gly Gln Ala Leu Gln Leu His Ala Asp Val Glu Asn 195 **20**0 205

Gln Ser Gly Lys Asp Thr Ser Pro Val Val Ala Ser Leu Leu Gln Lys 210 215 220

Val Ser Tyr Lys Ala Lys Arg Trp Ile His Asp Val Arg Thr Ile Ala

1293

225 230 235 Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln Trp His 245 250 Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro Ala Ala 265 Ala Ser Ser Thr Ser Thr Thr Thr Tyr Arg Ser Leu 275 280 <210> 1268 <211> 254 <212> PRT <213> Homo sapiens <400> 1268 Val Trp Leu Arg Val Glu Asn Val Cys Gln Gly Pro Gly Gln Glu Gly 5 10 Gly Pro Pro Val Thr Met Val Ser Met Ser Phe Lys Arg Asn Arg Ser Asp Arg Phe Tyr Ser Thr Arg Cys Cys Gly Cys Cys His Val Arg Thr 40 Gly Thr Ile Ile Leu Gly Thr Trp Tyr Met Val Val Asn Leu Leu Met 50 55 Ala Ile Leu Leu Thr Val Glu Val Thr His Pro Asn Ser Met Pro Ala 70 75 Val Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met Phe 100 Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln Val Gly 115 120 Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe Val Leu Ser 135 Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro Arg Ile Lys Glu 145 160 Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys Asp Asp Leu Leu Ala 165 170

1294

Leu Asp Ser Ser Cys Leu Leu Phe Ile Val Leu Val Phe Phe Ala Leu 180 185 190

Phe Ile Ile Phe Lys Ala Tyr Leu Ile Asn Cys Val Trp Asn Cys Tyr 195 200 205

Lys Tyr Ile Asn Asn Arg Asn Val Pro Glu Ile Ala Val Tyr Pro Ala 210 215 220

Phe Glu Ala Pro Pro Gln Tyr Val Leu Pro Thr Tyr Glu Met Ala Val 225 230 235 240

Lys Met Pro Glu Lys Glu Pro Pro Pro Pro Tyr Leu Pro Ala 245 250

<210> 1269

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1269

Lys Ser Ile Leu Val Ile Arg Val Tyr Phe Phe Tyr Arg Thr Arg Trp

1 5 10 15

Xaa Gly Glu Pro Phe Thr Leu Leu Val Lys Leu Asn His Arg Lys
20 25 30

Phe Thr Ile Cys Leu Ser Gln Thr Leu Ala Val Arg Gly Met Val Ala

35 40 45 Xaa Ala Cys Xaa Xaa Pro Ala Cys Trp Gly Gly Pro Ser Trp Gly Gly 55 60 50 Leu Pro Glu 65 <210> 1270 <211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1270

PCT/US00/05882

Gly Ser Pro Gly Thr Xaa Arg Ile Pro Xaa Thr Arg Xaa Glu Thr Cys
1 5 10 15

Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu 20 25 30

Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly
35 40 45

Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly 50 55 60

Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly
65 70 75 80

Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu Trp 85 90 95

Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly Thr 100 105 110

Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp Met
115 120 125

Met Val Asp Cys Thr Cys Leu Gly Glu Xaa Ser Gly Arg Ile Thr Cys 130 135 140

Thr Ser Arg Asn Arg Cys Asn Xaa Gln Asp Thr Arg Thr Ser Ile Glu 145 150 155 160

Xaa Glu Thr Xaa

WO 00/55350

<210> 1271

<211> 363

<212> PRT

<213> Homo sapiens

<400> 1271

Ala Arg Gly Ser Glu Cys Gly Gln Arg Ala Glu Ala Val Ser His Arg 1 5 10 15

Arg Arg Arg Ala Gln Ala Ser Ser Phe Gly Trp Gly Ala Ala Glu 20 25 30

Leu Thr Ser Asp Ile Ser Ala Pro Phe Thr Arg Arg Asn Pro Gly Ala 35 40 45

Gly Ala Arg Ser Ala Gly Val Thr Met Thr Lys Ala Gly Ser Lys Gly

	. 50					55					60				
Gly 65	Asn	Leu	Arg	Asp	Lys 70	Leu	Asp	Gly	Asn	Glu 75	Leu	Asp	Leu	Ser	Leu 80
Ser	Asp	Leu	Asn	Glu 85	Val	Pro	<b>V</b> al	Lys	Glu 90	Leu	Ala	Ala	Leu	Pro 95	Lys
Ala	Thr	Ile	Leu 100	Asp	Leu	Ser	Cys	Asn 105		Leu	Thr	Thr	Leu 110	Pro	Ser
Asp	Phe	Cys 115	Gly	Leu	Thr	His	Leu 120	Val	Lys	Leu	Asp	Leu 125	Ser	Lys	Asn
Lys	Leu 130	Gln	Gln	Leu	Pro	Ala 135	Asp	Phe	Gly	Arg	Leu 140	Val	Asn	Leu	Gln
His 145	Leu	Asp	Leu	Leu	Asn 150	Asn	Lys	Leu	Val	Thr 155	Leu	Pro	Val	Ser	Phe
Ala	Gln	Leu	Lys	Asn 165	Leu	Lys	Trp	Leu	Asp 170	Leu	Lys	Asp	Asn	Pro 175	Leu
Asp	Pro	Val	Leu 180	Ala	Lys	Val	Ala	Gly 185	Asp	Cys	Leu	Asp	Glu 190	Lys	Gln
Cys	Lys	Gln 195	Суѕ	Ala	Asn	Lys	_Val 200	Leu	Gln	His	Met	Lys 205	Ala	Val	Gln
Ala	Asp 210	Gļn	Glu	Arg	Glu	Arg 215	Gln	Arg	Arg	Leu	Glu 220	Val	Glu	Arg	Glu
Ala 225	Glu	Lys	Lys	Arg	Glu 230	Ala	Lys	Gln	Arg	Ala 235	Lys	Glu	Ala	Gln	Glu 240
Arg	Glu	Leu	Arg	Lys 245	Arg	Glu	L <b>y</b> s	Ala	Glu 250	Glu	Lys	Glu	Arg	Arg 255	Arg
Lys	Glu	Tyr	Asp 260	Ala	Leu	Lys	Ala	Ala 265	Lys	Arg	Glu	Gln	Glu 270	Lys	Lys
Pro	Lys	Lys 275	Glu	Ala	Asn	Gln	Ala 280	Pro	·Lys	Ser	Lys	Ser 285	Gly	Ser	Arg
Pro	Arg 290	Lys	Pro	Pro	Pro	Arg 295	Lys	His	Thr	Arg	Ser 300	Trp	Ala	Val	Leu
Lys 305	Leu	Leu	Leu	Leu	Leu 310	Leu	Leu	Phe	Gly	Val 315	Ala	Gly	Gly	Leu	Val 320
Ala	Cys	Arg	Val	Thr	Glu	Leu	Glm	Gln	Gln	Pro	Leu	Cys	Thr	Ser	Val

1298

335 325 330 Asn Thr Ile Tyr Asp Asn Ala Val Gln Gly Leu Arg Arg His Glu Ile 340 345 Leu Gln Trp Val Leu Gln Thr Asp Ser Gln Gln 355 360 <210> 1272 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids Gly Leu Val Met Ala Pro Ile Ala Cys Leu Leu Pro Ala Phe Ser Ser Ala Pro Glu Ala Met His Pro Trp Glu Leu Phe Val Lys Tyr Tyr His 25 Ala Lys Asn Gly Arg Ala Tyr Val Glu Ser Pro Ala Arg Lys Leu Ser 35 Gln Ser Phe Ala Leu Pro Val Thr Gly Gly Thr Val Val Thr Pro Lys Gln Ser Leu Leu Thr Ala Ile His Met Val Leu Thr Glu His Asp Pro 70 75 Phe Lys Arg Ser Ala Asp Ser Glu Leu Lys Ala Leu Val Cys Met Ala 90 85

Leu Asn Glu Pro Ala Ser Gly Val Leu Gly Glu Pro His Leu Gln Xaa 105

Arg Val Thr Xaa Arg Ala Ser Leu Pro Ala Leu Xaa Leu His Gly Thr
115 120 125

His Arg Leu Leu Lys Ile Ala Ser Thr Cys Ser Val Ala Ser Thr Thr

<210> 1273

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1273

Ala Arg Ala Pro Pro Arg Pro Arg Arg Ala Gly Arg Cys Gln Leu Pro 1 5 10 15

Gln Arg Pro Ala Glu Ala Arg Cys Met Leu Ser Arg Cys Arg Ser Xaa 20 25 30

Leu Leu His Val Leu Gly Leu Ser Phe Leu Leu Gln Thr Arg Arg Pro 35 40 45

Ile Leu Leu Cys Ser Pro Arg Leu Met Lys Pro Leu Val Val Phe Val 50 55 60

Leu Gly Gly Pro Gly Ala Gly Lys Gly Thr Gln Cys Ala Arg Ile Val 65 70 75 80

Glu Lys Tyr Gly Tyr Thr His Leu Ser Ala Gly Glu Leu Leu Arg Asp 85 90 95

Glu Arg Lys Asn Pro Asp Ser Gln Tyr Gly Glu Leu Ile Glu Lys Tyr 100 105 110

Ile Lys Glu Gly Lys Ile Val Pro Val Glu Ile Thr Ile Ser Leu Leu 115 120 125

Lys Arg Glu Met Asp Gln Thr Met Ala Ala Asn Ala Gln Lys Asn Lys 130 135 140

Phe Leu Ile Asp Gly Phe Pro Arg Asn Gln Asp Asn Leu Gln Gly Trp

1300

160 150 155 145 Asn Lys Thr Met Asp Gly Lys Ala Asp Val Ser Phe Val Leu Phe Phe 170 Asp Cys Asn Asn Glu Ile Cys Ile Glu Arg Cys Leu Glu Arg Gly Lys 185 Ser Ser Gly Arg Ser Asp Asp Asn Arg Glu Ser Leu Glu Lys Arg Ile 200 195 Gln Thr Tyr Leu Gln Ser Thr Lys Pro Ile Ile Asp Leu Tyr Glu Glu 215 Met Gly Lys Val Lys Lys Ile Asp Ala Ser Lys Ser Val Asp Glu Val 235 230 Phe Asp Glu Val Val Gln Ile Phe Asp Lys Glu Gly 245 <210> 1274 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1274 Ala Ser Glu Arg Ser Glu Ala Arg Arg Lys Leu Arg Glu Cys Asp Gly 10 Leu Val Asp Ala Leu Ile Phe Ile Val Gln Ala Glu Ile Gly Gln Lys Asp Ser Xaa Ser Lys Leu Val Glu Asn Cys Val Cys Leu Leu Arg Asn 35 40 Leu Ser Tyr Gln Val His Arg Glu Ile Pro Gln Ala Glu Arg Tyr Gln Glu Ala Ala Pro Asn Val Ala Asn Asn Thr Gly Pro His Ala Ala Ser 75 70 Cys Phe Gly Ala Lys Lys Gly Lys Gly Lys Pro Ile Glu Asp Pro 90

Ala Asn Asp Thr Val Asp Phe Pro Lys Arg Thr Ser Pro Ala Arg Gly 105 Tyr Glu Leu Leu Phe Gln Pro Glu Val Val Arg Ile Tyr Ile Ser Leu 120 Leu Lys Glu Ser Lys Thr Pro Ala Ile Leu Glu Ala Ser Ala Gly Ala 135 Ile Gln Asn Leu Cys Ala Gly Arg Trp Thr Tyr Gly Arg Tyr Ile Arg 150 155 Ser Ala Leu Arg Gln Glu Lys Ala Leu Ser Ala Ile Ala Asp Leu Leu 170 Thr Asn Glu His Glu Arg Val Val Lys Ala Ala Ser Gly Ala Leu Arg 180 Asn Leu Ala Val Asp Ala Arg Asn Lys Glu Leu Ile Gly Lys His Ala 200 Ile Pro Asn Leu Val Lys Asn Leu Pro Gly Gly Gln Gln Asn Ser Ser 215 220 210 Trp Asn Phe Ser Glu Asp Thr Val Ile Ser Ile Leu Asn Thr Ile Asn 230 235 Glu Val Ile Ala Glu Asn Leu Glu Ala Ala Lys Lys Leu Arg Glu Thr 250 Gln Gly Ile Glu Lys Leu Val Leu Ile Asn Lys Ser Gly Asn Arg Ser 260 Glu Lys Glu Val Arg Ala Ala Ala Leu Val Leu Gln Thr Ile Trp Gly Tyr Lys Glu Leu Arg Lys Pro Leu Glu Lys Glu Gly Trp Lys Lys Ser 295 Asp Phe Gln Val Asn Leu Asn Asn Ala Ser Arg Ser Gln Ser Ser His 305 310 Ser Tyr Asp Asp Ser Thr Leu Pro Leu Ile Asp Arg Asn Gln Lys Ser 330 Asp Lys Lys Pro Asp Arg Glu Glu Ile Gln Met Ser Asn Met Gly Ser 345 Asn Thr Lys Ser Leu Asp Asn Asn Tyr Ser Thr Pro Asn Glu Arg Gly 355 360

Asp His Asn Arg Thr Leu Asp Arg Ser Gly Asp Leu Gly Asp Met Glu 370 375 380

Pro Leu Lys Gly Thr Thr Pro Leu Met Gln Asp Glu Gly Gln Glu Ser 385 390 395 400

Leu Glu Glu Leu Asp Val Leu Val Leu Asp Asp Glu Gly Gln
405
410
415

Val Ser Tyr Pro Ser Met Gln Lys Ile 420 425

<210> 1275

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1275

Phe Phe Phe Ser Ser Leu Phe Ser Leu Xaa Phe Leu Lys Lys Gly Lys
1 5 10 15

Lys Cys Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu 20 25 30

Ser Gly Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val 35 40 45

Cys Thr Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro 50 55 60

Val Glu Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met 65 70 75 80

Phe Ile Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp 85 90 95

Ile Phe Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala 100 105 110

<210> 1276

<211> 766

<212> PRT

<213> Homo sapiens

<400> 1276

Gly Asp Phe Ile Met Leu Arg Ala Gly Arg Arg Ala Pro Leu Pro Ser 1 5 10 15

Pro Pro Ser Leu Asp Ser Pro Gly Pro Gln Leu Met Pro Ser Pro Arg
20 25 30

Pro Val Leu Leu Arg Gly Ala Arg Ala Leu Leu Leu Leu Leu Pro 35 40 45

Pro Arg Leu Leu Ala Arg Pro Ser Leu Leu Leu Arg Arg Ser Leu Ser 50 55 60

Ala Ala Ser Cys Ala Pro Ile Ser Leu Pro Ala Ala Ala Ser Arg Ser 65 70 75 80

Ser Met Asp Gly Ala Gly Ala Glu Glu Val Leu Ala Pro Leu Arg Leu 85 90 95

Ala Val Arg Gln Gln Gly Asp Leu Val Arg Lys Leu Lys Glu Asp Lys
100 105 110

Ala Pro Gln Val Asp Val Asp Lys Ala Val Ala Glu Leu Lys Ala Arg 115 120 125

Lys Arg Val Leu Glu Ala Lys Glu Leu Ala Leu Gln Pro Lys Asp Asp 130 135 140

Ile Val Asp Arg Ala Lys Met Glu Asp Thr Leu Lys Arg Arg Phe Phe 145 150 155 160

Tyr Asp Gln Ala Phe Ala Ile Tyr Gly Gly Val Ser Gly Leu Tyr Asp 165 170 175

Phe Gly Pro Val Gly Cys Ala Leu Lys Asn Asn Ile Ile Gln Thr Trp 180 185 190

Arg Gln His Phe Ile Gln Glu Glu Gln Ile Leu Glu Ile Asp Cys Thr 195 200 205

Met Leu Thr Pro Glu Pro Val Leu Lys Thr Ser Gly His Val Asp Lys 210 215 220

Phe Ala Asp Phe Met Val Lys Asp Val Lys Asn Gly Glu Cys Phe Arg 225 230 235 240

Ala Asp His Leu Leu Lys Ala His Leu Gln Lys Leu Met Ser Asp Lys 245 250 255

					`.										
Ľys	Cys	Ser	Val 260	Glu	Lys	Lys	Ser	Glu 265	Met	Glu	Ser	Val	Leu 270	Ala	Gln
Leu	Asp	Asn 275	туг	Gly	Gln	Gln	<b>Gl</b> u <b>2</b> 80	Leu	Ala	Asp	Leu	Phe 285	Val	Asn	Tyr
Asn	Val 290	Lys	Ser	Pro	Ile	Thr 295	Gly	Asn	Asp	Leu	Ser 300	Pro	Pro	Val	Ser
Phe 305	Asn	Leu	Met	Phe	Lys 310	Thr	Phe	Ile	Gly	Pro 315	Gly	Gly	Asn	Met	Pro 320
Gly	Ţyr	Leu	Arg	Pro 325	Glu	Thr	Ala	Gln	Gly 330	Ile	Phe	Leu	Asn	Phe 335	Lys
Arg	Leu	Leu	Glu 340	Phe	Asn	Gln	Gly	Lys 345	Leu	Pro	Phe	Ala	Ala 350	Ala	Gln
Ile	Gly	Asn 355	Ser	Phe	Arg	Asn	Glu 360	Ile	Ser	Pro	Arg	Ser 365	Gly	Leu	Ile
Arg	Val 370	Arg	Glu	Phe	Thr	Met 375	Ala	Glu	Ile	Glu	His 380	Phe	Val	Asp	Pro
Ser 385	Glu	Lys	Asp	His	Pro 390	Lys	Phe	Gln	Asn	Val 395	Ala	Asp	Leu	His	Leu 400
Tyr	Leu	Tyr	Ser	Ala 405	Lys	Ala	Gln	Val	Ser 410	Gly	Gln	Ser	Ala	Arg 415	Lys
Met	Arg	Leu	Gly 420	Asp	Ala	Val	Glu	Gln 425	Gly	Val	Ile	Asn	Asn 430	Thr	Val
Leu	Gly	Tyr 435	Phe	Ile	Gly	Arg	Ile 440	Tyr	Leu	Tyr	Leu	Thr 445	Lys	Val	Gly
Ile	Ser 450	Pro	Asp	Lys	Leu	Arg 455	Phe	Arg	Gl'n	His	Met 460	Glu	Asn	Glu	Met
Ala 465	His	туг	Ala	Суз	Asp 470	Cys	Trp	Asp	Ala	Glu 475	Ser	Lys	Thr	Ser	Tyr 480
Gly	Trp	Ile	Glu	Ile 485	Val	Gly	Cys	Ala	Asp 490	Arg	Ser	Cys	Tyr	Asp 495	Leu
Ser	Cys	His	Ala 500	Arg	Ala	Thr	L <b>y</b> s	Val 505	Pro	Leu	Val	Ala	Glu 510	Lys	Pro
Leu	Lys	Glu 515	Pro	Lys	Thr	Val	Asn 520	Val	Val	Gln	Phe	Glu 525	Pro	Ser	Lys

Gly Ala Ile Gly Lys Ala Tyr Lys Lys Asp Ala Lys Leu Val Met Glu Tyr Leu Ala Ile Cys Asp Glu Cys Tyr Ile Thr Glu Met Glu Met Leu 550 555 Leu Asn Glu Lys Gly Glu Phe Thr Ile Glu Thr Glu Gly Lys Thr Phe 565 570 Gln Leu Thr Lys Asp Met Ile Asn Val Lys Arg Phe Gln Lys Thr Leu 585 Tyr Val Glu Glu Val Val Pro Asn Val Ile Glu Pro Ser Phe Gly Leu 595 600 Gly Arg Ile Met Tyr Thr Val Phe Glu His Thr Phe His Val Arg Glu 615 Gly Asp Glu Gln Arg Thr Phe Phe Ser Phe Pro Ala Val Val Ala Pro 630 635 Phe Lys Cys Ser Val Leu Pro Leu Ser Gln Asn Gln Glu Phe Met Pro 645 650 Phe Val Lys Glu Leu Ser Glu Ala Leu Thr Arg His Gly Val Ser His Val App 200 000 . Turkin 44 - Bull Gold Kolley allender 1990 - K Lys Val Asp Asp Ser Ser Gly Ser Ile Gly Arg Arg Tyr Ala Arg Thr 680 Asp Glu Ile Gly Val Ala Phe Gly Val Thr Ile Asp Phe Asp Thr Val 695 . 700 690 Asn Lys Thr Pro His Thr Ala Thr Leu Arg Asp Arg Asp Ser Met Arg 710 715 Gln Ile Arg Ala Glu Ile Ser Glu Leu Pro Ser Ile Val Gln Asp Leu 730 Ala Asn Gly Asn Ile Thr Trp Ala Asp Val Glu Ala Arg Tyr Pro Leu 740 745

Phe Glu Gly Gln Glu Thr Gly Lys Lys Glu Thr Ile Glu Glu

760

<210> 1277

<211> 386

<212> PRT

<213> Homo sapiens

WO 00/55350

~ ~ ~	0-														
<22	1> s	ITE													
<22	2> (	75)													
<22	3> X	aa e	qual:	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
			_		-										
<40	0> 1	277													
Leu	Glv	Ser	Arg	Gln	Ala	Ala	Gly	Thr	Met	Arg	Gly	Gln	Arg	Ser	Le
1			5	5			•		10	•	•		-	15	
_															
T.em	T.eu	Glv	Pro	Ala	Ara	Len	Cvs	Leu	Ara	Leu	Leu	Leu	Leu	Leu	Gl
		1	20		9		-1-	25					30		
			20					23							
m	A = ~	7 ~~	7~~	Cur	Dro	Bro	Tau	Lav	Ara	Gly	T.O.I	t/a l	Gln	Ara	ሞም
ıyı	ALG		ALG	Cys	PIO	PIO	_	nea	ni 9	GLY	Dea	45	<b>G1</b>	my	1
		35					40					4.5			
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Arg	_	GIY	гÀг	val	Cys		Arg	ser	Leu	Leu		ASII	Ser	FILE	GI
	50					55					60				
						_					_				_
_	ser	Asp	Thr	Ala		Asp	Ala	Ala	Phe	Xaa	Pro	vaı	Tyr	Trp	
65					70					75					8
Val	Asp	Asn	Val	Ile	Arg	Trp	Phe	Gly	Val	Val	Phe	Val	Val		Va.
				85					90					95	
Ile	Val	Leu	Thr	Gly	Ser	Ile	Val	Ala	Ile	Ala	Tyr	Leu	Cys	Val	Le
			100					105					110		
Pro	Leu	Ile	Leu	Arg	Thr	Tyr	Ser	Val	Pro	Arg	Leu	Cys	Trp	His	Phe
		115					120				-	125			
Phe	Tyr	Ser	His	Trp	Asn	Leu	Ile	Leu	Ile	Val	Phe	His	Tyr	Tyr	Gl
	130					135					140				
Ala	Ile	Thr	Thr	Pro	Pro	Gly	Tyr	Pro	Pro	Gln	Gly	Arg	Asn	Asp	Ile
145					150	•	•			155	-	_		_	160
Ala	Thr	Va 1	Ser	Tle	Cvs	T.vs	Lvs	Cvs	Tle	Tyr	Pro	Lvs	Pro	Ala	Arc
				165	-1-	-1-	-1-	-1-	170	- 2 -				175	
				- 00											
Thr	ије	Hie	Cve	Sar	T10	Cve	Asn	Ara	Cva	Val	Leu	ī.vs	Met	Asp	His
1111		1113	180	061	110	<b>C</b> <sub>1</sub> S		185	<b>-</b> 10			-1-	190		
			100					103					130		
	G		m	T			<b>~</b>	170 7	C1	uic	TT	8.00	uia	N = ~	m
HIS	Cys		тгр	Leu	Asn	Asn	_	vai	GIA	His	TYE		HIS	Arg	ту
		195					200					205			
		_		_					_	۵.	-			_	_
Phe		Ser	Phe	Cys	Phe		Met	Thr	Leu	Gly		val	Tyr	cys	sei
	210					215					220				
											- <del>-</del>				_
-	Gly	Ser	Trp	Asp		Phe	Arg	Glu	Ala	Tyr	Ala	Ala	Ile	Glu	
225					230					235					240

Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr 245 250 255

Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr 260 265 270

His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu 275 280 285

Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly 290 295 300

Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Leu 305 310 315 320

Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu 325 330 335

Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu 340 345 350

Thr Arg Val Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met 355 360 365

Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met 370 375 380

Ala Val

<210> 1278

<211> 164

<212> PRT

<213> Homo sapiens

<400> 1278

Val Lys Ala Ser Ala Glu Thr Pro Arg Pro Gln Pro Val Asp Lys Leu
1 5 10 15

Glu Lys Ile Leu Glu Lys Leu Leu Thr Arg Phe Pro Gln Cys Asn Lys 20 25 30

Ala Gln Met Thr Asn Ile Leu Gln Gln Ile Lys Thr Ala Arg Thr Thr 35 40 45

Met Ala Gly Leu Thr Met Glu Glu Leu Ile Gln Leu Val Ala Ala Arg 50 55 60

1308

Leu Ala Glu His Glu Arg Val Ala Ala Ser Thr Gln Pro Leu Gly Arg 65 70 75 Ile Arg Ala Leu Phe Pro Ala Pro Leu Ala Gln Ile Ser Thr Pro Met Phe Leu Pro Ser Ala Gln Val Ser Tyr Pro Gly Arg Ser Ser His Ala 100 Pro Ala Thr Cys Lys Leu Cys Leu Met Cys Gln Lys Leu Val Gln Pro 120 Ser Glu Leu His Pro Met Ala Cys Thr His Val Leu His Lys Glu Cys 135 Ile Lys Phe Trp Ala Gln Thr Asn Thr Asn Asp Thr Cys Pro Phe Cys 150 155 Pro Thr Leu Lys <210> 1279 <211> 469 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1279 Pro Val Ala Val Gly Arg Val Arg Val Thr Ala Glu Gly Arg Xaa Met 5 Val Leu Gln Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala 20

His Leu Leu Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly 35 40 45

Leu Cys Gly Asn Phe Asn Gly Asn Trp Ser Asp Asp Phe Val Leu Pro

60

55

65	GIÀ	ser	Ala	Ala	70	ser	vaı	GIU	THE	75	GIY	Ala	Ala	TLD	80
Xaa	Pro	Gly	Ser	Ser 85	Lys	Gly	Cys	Gly	Glu 90	Gly	Cys	Gly	Pro	Gln 95	Gly
Cys	Pro	Val	Cys 100	Leu	Ala	Glu	Glu	Thr 105	Ala	Pro	Tyr	Glu	Ser 110	Asn	Glu
Ala	Cys	Gly 115	Gln	Leu	Arg	Asn	Pro 120	Gln	Gly	Pro	Phe	Ala 125	Thr	Cys	G1n
	130					135					140			Asp	
145			_		150					155				Ala	160
				165					170					Trp 175	
			180	_				185					190	Tyr	
	-	195					200					205		Gly	
	210	_				215					220			Asp	
225					230	·				235				Gly	240
				245					250					Thr 255	
	_		260					265					270	Thr	
		275					280					285		Ala	
	290		_	_		295		_			300			Val	
305					310					315				Ser	320
Gly	Val	Tyr	Glu	Leu 325	Ser	Ser	Arg	Cys	Pro 330	Gly	Leu	GIn	Asn	Thr 335	Ile

1310

Pro Trp Tyr Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr 345 Glu Ala Val Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr 360 Leu Thr Pro Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu 370 375 Pro Ala Glu Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly 390 395 Ser Leu Leu Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala Asn Gly Lys Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu 420 425 . Cys Gly Ala Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His 440 Asp Ser Gln Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe 455 Ser Pro Cys Tyr Gly 465 <210> 1280 <211> 223 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1280 Gly Pro Arg Ala Leu Trp Pro Pro Pro Glu Val Gly Trp Gly Cys Ser

Pro Asn Pro Thr Leu Leu Pro Pro Leu Ser His Phe Pro Leu Leu Arg

25

1311

Trp Gly Thr Asn Asn Lys Glu Leu Thr Leu Pro Ala Pro Asn Pro Pro 40 Pro Ala Pro Pro Cys Pro Pro Arg Phe Trp Phe His Phe Ser Ser Val His Lys Leu Pro Leu Asp Ser Cys Val Val Phe Cys Ser Met Phe His 75 Ser Ser Thr Ser Val Ile Ala Ala Ala Thr Ser Ala Lys Cys Ser Ser 85 90 Ser Leu Pro Pro Val Leu Pro Thr Ile Pro Ser Pro Lys Ile Leu Phe 105 Val Gly Lys Arg Gly Trp Gly Met Ala Gly Trp Val Thr Asp Tyr Pro 115 Ser Pro Arg Glu Gly Gly Ala Leu Pro Leu Gly Cys Cys Ser Arg Val 135 Ser Lys Gly Ala Arg Ile Asp His Lys Gly Cys Arg Gly His Leu Leu 155 150 Pro Leu Phe Cys Trp Gly Gly Val Ala Met Ile Cys Pro Ser Leu Gly 165 170 Leu Pro Leu Trp Phe Pro Ile Cys Ser Tyr Leu Asn Lys Lys Asn Ile

Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Pro Pro 210 215 220

<210> 1281

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1281

Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln 1 5 10 15

1312

Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Lys Asn Phe Xaa Gly

Thr Gln Pro Lys Gly 35

<210> 1282

<211> 458

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1282

Gly Pro Gln Arg Leu Ser Pro Gly Ala Met Leu Pro Ala Ala Thr Ala 1 5 10 15

Ser Leu Leu Gly Pro Leu Leu Thr Ala Cys Ala Leu Leu Pro Phe Ala 20 25 30

Gln Gly-Gln Thr Pro Asn Tyr-Thr Arg Pro Val Phe Leu Cys Gly Gly
35 40 45

Asp Val Lys Gly Glu Ser Gly Tyr Val Ala Ser Glu Gly Phe Pro Asn 50 55 60

Leu Tyr Pro Pro Asn Lys Glu Cys Ile Trp Thr Ile Thr Val Pro Glu 65 70 75 80

Gly Gln Thr Val Ser Leu Ser Phe Arg Val Phe Asp Leu Glu Leu His 85 90 95

Pro Ala Cys Arg Tyr Asp Ala Leu Glu Val Phe Ala Gly Ser Gly Thr
100 105 110

Ser Gly Gln Arg Leu Gly Arg Phe Cys Gly Thr Phe Arg Pro Ala Pro 115 120 125

Leu Val Ala Pro Gly Asn Gln Val Thr Leu Arg Met Thr Thr Asp Glu 130 135 140

Gly Thr Gly Gly Arg Gly Phe Leu Leu Trp Tyr Ser Gly Arg Ala Thr 145 150 155 160

Ser Gly Thr Glu His Gln Phe Cys Gly Gly Arg Leu Glu Lys Ala Gln

165 170 175 Gly Thr Leu Thr Thr Pro Asn Trp Pro Glu Ser Asp Tyr Pro Pro Gly 180 185 Ile Ser Cys Ser Trp His Ile Ile Ala Pro Pro Asp Gln Val Ile Ala 200 Leu Thr Phe Glu Lys Phe Asp Leu Glu Pro Asp Thr Tyr Cys Arg Tyr 215 Asp Ser Val Ser Val Phe Asn Gly Ala Val Ser Asp Asp Ser Arg Arg Leu Gly Lys Phe Cys Gly Asp Ala Xaa Pro Gly Ser Ile Ser Ser Glu 245 Gly Asn Glu Leu Leu Val Gln Phe Val Ser Asp Leu Ser Val Thr Ala 260 265 Asp Gly Phe Ser Ala Ser Tyr Lys Thr Leu Pro Arg Gly Thr Ala Lys 280 Glu Gly Gln Gly Pro Gly Pro Lys Arg Gly Thr Glu Pro Lys Val Lys 295 300 Leu Pro Pro Lys Ser Gln Pro Pro Glu Lys Thr Glu Glu Ser Pro Ser Ala Pro Asp Ala Pro Thr Cys Pro Lys Gln Cys Arg Arg Thr Gly Thr 325 330 Leu Gln Ser Asn Phe Cys Ala Ser Ser Leu Val Val Thr Ala Thr Val 345 Lys Ser Met Val Arg Glu Pro Gly Glu Gly Leu Ala Val Thr Val Ser 355 360 365 Leu Ile Gly Ala Tyr Lys Thr Gly Gly Leu Asp Leu Pro Ser Pro Pro Thr Gly Ala Ser Leu Lys Phe Tyr Val Pro Cys Lys Gln Cys Pro Pro 390 395 Met Lys Lys Gly Val Ser Tyr Leu Leu Met Gly Gln Val Glu Glu Asn 405 Arg Gly Pro Val Leu Pro Pro Glu Ser Phe Val Val Leu His Arg Pro 420 425 Asn Gln Asp Gln Ile Leu Thr Asn Leu Ser Lys Arg Lys Cys Pro Ser

1314

435 440 445

Gln Pro Val Arg Ala Ala Ala Ser Gln Asp 450 455

<210> 1283

<211> 229

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (154)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (155)

<223> Xaa equals any of the maturally occurring L-amino acids

<400> 1283

Cys Arg Ala Pro Leu Gly Ala Gly Leu Ser Pro Ala Val Arg Arg Gln
1 5 10 15

Glu Pro Pro Phe Pro Leu Gly Wal Thr Arg Gly Trp Gly Arg Trp Pro
20 25 30

Ile Gln Lys Arg Glu Gly Ala Arg Pro Val Pro Xaa Ser Glu Arg

Ser Gln Glu Asp Gly Arg Gly Pro Ala Ala Arg Ser Ser Gly Thr Leu
50 55 60

Trp Arg Ile Arg Thr Arg Leu Ser Leu Cys Arg Asp Pro Glu Pro Pro 65 70 75 80

Pro Pro Leu Cys Leu Leu Arg Val Ser Leu Leu Cys Ala Leu Arg Ala 85 90 95

Gly Gly Arg Gly Ser Arg Trp Gly Glu Asp Gly Ala Arg Leu Leu Leu 100 105 110

Leu Pro Pro Ala Arg Ala Ala Gly Asn Gly Glu Ala Glu Pro Ser Gly 115 120 125

Gly Pro Ser Tyr Ala Gly Arg Met Leu Glu Ser Ser Gly Cys Lys Ala 130 135 140

PCT/US00/05882

Leu Lys Glu Gly Val Leu Glu Lys Arg Xaa Xaa Gly Cys Cys Ser Ser 145 150 155 160

Gly Arg Lys Ser Val Ala Ser Ser Pro Arg Lys Gly Cys Cys Leu Ser 165 170 175

Arg Pro Ser Ser Cys Asn Thr Ser Ser Ser Ser Asn Ser Ser Ser Ser Ser 180 185 190

Ser Ser Asn Asn Ser Pro Gly Arg Gly Arg Pro Ser Arg Pro Asn Pro 195 200 205

Val Ala Pro Leu Ser Pro Ala Ser Ser Arg Arg Ser Ser Ser Arg Asn 210 215 220

Cys Thr Ser Pro Thr 225

WO 00/55350

<210> 1284

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1284

Thr Ser Val Ala Ala Ala Ala Ala Arg Gly Arg Ala Gly Cys Pro Leu
1 5 10 15

Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser
20 25 30

Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe 35 40 45

Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu 50 55 60

Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu 65 70 75 80

Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile

Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu Thr Ser Lys Tyr Cys Pro Ile Cys Asp Val Gln Val His Lys Thr Arg Pro Leu Leu Asn Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr Lys Leu Val Pro Gly Leu Phe Lys Asn Glu Met Lys Arg Arg Arg Asp Phe Tyr Ala Ala His Pro Ser Ala Asp Ala Ala Asn Gly Ser Asn Glu Asp Arg Gly Glu Val Ala Asp Glu Asp Lys Arg Ile Ile Thr Asp Asp Glu Ile Ile Ser Leu Ser Ile Glu Phe Phe Asp Gln Asn Arg Leu Asp Arg Lys Val Asn Lys Asp Lys Glu Lys Ser Lys Glu Glu Val Asn Asp Lys Arg Tyr Leu Arg Cys Pro Ala Ala Met Thr Val Met His Leu Arg Lys Phe Leu Arg Ser Lys Met Asp Ile Pro Asn Thr Phe Gln Ile Asp Val Met Tyr Glu Glu Glu Pro Leu Lys Asp Tyr Tyr Thr Leu Met Asp Ile Ala Tyr Ile Tyr Thr Trp Arg Arg Asn Gly Pro Leu Pro Leu Lys Tyr Arg Val Arg Pro Thr Cys Lys Arg Met Lys Ile Ser His Gln Arg Asp Gly Leu Thr Asn Ala Gly Glu Leu Glu Ser Asp Ser Gly Ser Asp Lys Ala Asn Ser Pro Ala Gly Gly Ile Pro Ser Thr Ser Ser Cys Leu Pro Ser Pro Ser Thr Pro Val Gin Ser Pro His Pro Gln Phe Pro His Ile Ser Ser Thr Met Asn Gly Thr Ser Asn Ser Pro Ser Gly Asn His

1317

365 355 360 Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser 375 Ser Ala Thr Ser Ser Gly 390 <210> 1285 <211> 39 <212> PRT <213> Homo sapiens <400> 1285 His Ala Ser Ala Gly Ser Gln Leu Phe Glu Met His Glu Lys Leu Ser 10 Cys Met Ala Asn Ser Val Ile Lys Asn Leu Gln Ser Arg Trp Arg Ser 25 Pro Ser His Glu Asn Ser Ile 35 <210> 1286

<211> 453 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (286) <223> Xaa equals any of the naturally occurring L-amino acids

P	Arg 1	Arg	Ser	Val	Ile 5	Cys	Asp	Ser	Asn	Ala 10	Thr	Ala	Leu	Glu	Leu 15	Pro
C	3ly	Leu	Pro	Leu 20	Ser	Leu	Pro	Gln	Pro 25	Ser	Ile	Pro	Ala	Ala 30	Val	Pro
C	3ln	Ser	Ala 35	Pro	Pro	Xaa	Pro	His 40	Arg	Glu	Glu	Thr	Val 45	Thr	Ala	Thr
F	Ala	Thr 50	Ser	Gln	Val	Ala	Gln 55	Gln	Pro	Pro	Ala	Ala 60	Ala	Ala	Pro	Gly
C	65 65	Gln	Ala	Val	Ala	Gly 70	Pro	Ala	Pro	Arg	Leu 75	Ser	Pro	Ala	Val	Pro 80
7	Ala	Lys	Thr	Ala	Gln 85	Cys	Pro	Ser	Leu	Ala 90	Leu	Trp	Gly	Ala	Lys 95	Arg
S	er	Arg	Arg	Arg 100	Xaa	Lys	Val	Ala	Ala 105	Ala	Ala	Gln	Ala	Xaa 110	Lys	Glu
F	ro	Gln	Glu 115	Glu	Arg	Ser	Gln	Gln 120	Gln	Asp	Asp	Ile	Glu 125	Glu	Leu	Glu
1	hr	Lys 130	Ala	Val	Gly	Met	Ser 135	Asn	Asp	Gly	Arg	Phe 140	Leu	Lys	Phe	Asp
1	45					150			Lys		155					160
1	'hr	Glu	Thr	Thr	Val 165	Glu	Val	Ala	Trp	Cys 170	Glu	Leu	Gln	Asp	Arg 175	Lys
			-	180		J			Phe 185	•				190		
L	ys	Gly	Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Glu

<400> 1286

210

225

Ile Lys Val Leu Arg Ser Trp Cys Arg Gln Ile Leu Lys Gly Leu Gln 245 250 255

Phe Leu His Thr Arg Thr Pro Pro Ile Ile His Arg Asp Leu Lys Cys

Ser Thr Val Lys Gly Lys Lys Cys Ile Val Leu Val Thr Glu Leu Met

Thr Ser Gly Thr Leu Lys Thr Tyr Leu Lys Arg Phe Lys Val Met Lys

235

215

1319

260 265 270

Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Xaa Gly Asp 275 280 285

Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile 290 295 300

Gly Thr Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp 305 310 315 320

Glu Ser Val Asp Val Tyr Ala Phe Gly Met Cys Met Leu Glu Met Ala 325 330 335

Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln Asn Ala Ala Gln Ile Tyr 340 345 350

Arg Arg Val Thr Ser Gly Val Lys Pro Ala Ser Phe Asp Lys Val Ala 355 360 365

Ile Pro Glu Val Lys Glu Ile Ile Glu Gly Cys Ile Arg Gln Asn Lys 370 375 380

Asp.Glu Arg Tyr Ser Ile Lys Asp Leu Leu Asn His Ala Phe Phe Gln 385 390 395 400

Glu Glu Thr Gly Val Arg Val Glu Leu Ala Glu Glu Asp Asp Gly Glu
405 410 415

Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile Glu Asp Ile Lys Lys Leu 420 425 430

Asn Thr His Arg Ala 450

<210> 1287

<211> 450

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

WO 00/55350

1320

PCT/US00/05882

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<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
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Ala Ala Glu Val Leu Cys Pro Ser Cys Phe Pro Ile Ser Pro Ala Pro
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                                     10
Trp Met Thr Val Gly Pro Ala Ser Ala Leu Phe Pro Cys Gln Thr Pro
                                 25
Xaa Phe Pro Trp Thr Glu Trp Asn Xaa Trp Xaa Phe Thr Ala His Val
                             40
Leu Ser Gln Lys Phe Glu Lys Glu Leu Ser Lys Val Arg Glu Tyr Val
     50
                         55
Gln Leu Ile Ser Val Tyr Glu Lys Lys Leu Leu Asn Leu Thr Val Arg
                                         75
                     70
Ile Asp Il Met Glu Lys Asp Thr Ile Ser Tyr Thr Glu Leu Asp Phe
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WO 00/55350

1321

90 95 85 Glu Leu Ile Lys Val Glu Val Lys Glu Met Glu Lys Leu Val Ile Gln 105 Leu Lys Glu Xaa Phe Gly Gly Ser Ser Glu Ile Val Asp Gln Leu Glu 120 Val Glu Ile Arg Asn Met Thr Leu Leu Val Glu Lys Leu Glu Thr Leu 130 135 Asp Lys Asn Asn Val Leu Ala Ile Arg Arg Glu Ile Val Ala Leu Lys 150 155 Thr Lys Leu Lys Glu Cys Glu Ala Ser Lys Asp Gln Asn Thr Pro Val Val His Pro Pro Pro Thr Pro Gly Ser Cys Gly His Gly Val Val 180 Xaa Ile Ser Lys Pro Ser Val Val Gln Leu Asn Trp Arg Gly Phe Ser 200 Tyr Leu Tyr Gly Ala Trp Gly Arg Asp Tyr Ser Pro Gln His Pro Asn 215 Lys Gly Leu Tyr Trp Val Ala Pro Leu Asn Thr Asp Gly Arg Leu Leu 225 230 235 Glu Tyr Tyr Arg Leu Tyr Asn Thr Leu Asp Asp Leu Leu Leu Tyr Ile 250 Asn Ala Arg Glu Leu Arg Ile Thr Tyr Gly Gln Gly Ser Gly Thr Ala Val Tyr Asn Asn Asn Met Tyr Val Asn Met Tyr Asn Thr Gly Asn Ile 275 280 Ala Arg Val Asn Leu Thr Thr Asn Thr Ile Ala Val Thr Gln Thr Leu 295 Pro Asn Ala Ala Tyr Asn Asn Arg Phe Xaa Tyr Ala Asn Val Ala Trp 315 305 310 Gln Asp Ile Asp Phe Xaa Val Asp Glu Asn Gly Leu Trp Val Ile Tyr 330 Ser Thr Glu Ala Ser Thr Gly Xaa Met Val Ile Ser Lys Leu Asn Asp 345 Thr Thr Leu Gln Val L u Asn Thr Trp Tyr Thr Lys Gln Tyr Lys Pr

1322

355 360 365 Ser Ala Ser Asn Ala Phe Met Wal Cys Gly Val Leu Tyr Ala Thr Arg 375 Thr Met Asn Thr Arg Thr Glu Glu Ile Phe Tyr Tyr Tyr Asp Thr Asn 390 395 Thr Gly Lys Glu Gly Lys Leu Asp Ile Val Met His Lys Met Gln Glu 405 Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr Val 425 Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln Lys 445 440 Pro Gln 450 <210> 1288 <211> 164 <212> PRT <213> Homo sapiens <400> 1288 Leu Gln Gln Ala Leu Pro Asn Asn Gly Leu Leu Phe Thr Trp Thr Leu Ser Lys Glu Gly Gly Arg Glu Gly Gln Ser Gly Val Ser Phe Gln His Ser Ser Gln Lys Gly Glu Arg Phe Ser Gly Trp Cys His Ala Ile Gly 40 Ile Lys Gln Glu Ala His Gly Trp Leu Leu Asn Glu Glu Gln Asn Leu 55 50 Gly Ala Leu Trp Leu Thr Thr Ala Ile Cys Gly Ala Gly Thr His Thr 70 Ser Arg Gln Leu Gln Phe Cys Thr Phe Ser Leu Leu Asp Ser Lys Ser 90 Arg Cys Cys Leu Ala Ala Leu Arg Gly His Ser Leu Leu Arg Arg Ala 100

Leu Gln Ser Pro Ala Pro Gly Leu Gly Glu Trp Met Arg Leu Leu Pro

125

120

1323

Tyr Asp Thr Cys Gln Asp Ala Leu Pro Pro Pro Leu Lys Val Gly Pro 130 135 140

Gly Gln His Cys Ser Leu Leu Ser Ala Phe Ser Gly Leu Arg Ser Gln 145 150 155 160

Tyr Glu Leu Pro

<210> 1289

<211> 40

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1289

Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile 1 5 10 15

Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser 20 25 30

Leu His Gln Phe Leu Arg Val Leu 35 40

<210> 1290

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1290

Asp Ile Met Glu Ser Gly Phe Thr Ser Lys Asp Thr Tyr Leu Ser His 1 5 10 15

Phe Asn Pro Arg Asp Tyr Leu Glu Lys Tyr Tyr Lys Phe Gly Ser Arg
20 25 30

His	Ser	Ala 35	Glu	Ser	Gln	Ile	Leu 40	Lys	His	Leu	Leu	Lys 45	Asn	Leu	Phe
Lys	Ile 50	Phe	Cys	Leu	Asp	Gly 55	Val	Lys	Gly	Asp	Leu 60	Leu	Ile	Asp	Ile

Gly Ser Gly Pro Thr Ile Tyr Gln Leu Leu Ser Ala Cys Glu Ser Phe 65 70 75 80

Lys Glu Ile Val Val Thr Asp Tyr Ser Asp Gln Asn Leu Gln Glu Leu 85 90 95

Glu Lys Trp Leu Lys Lys Glu Pro Glu Ala Phe Asp Trp Ser Pro Val 100 105 110

Val Thr Tyr Val Cys Asp Leu Glu Gly Asn Arg Val Lys Gly Pro Glu 115 120 125

Lys Glu Glu Lys Leu Arg Gln Ala Val Lys Gln Val Leu Lys Cys Asp 130 135 140

Val Thr Gln Ser Gln Pro Leu Gly Ala Val Pro Leu Pro Pro Ala Asp 145 150 155 160

Cys Val Leu Ser Thr Leu Cys Leu Asp Ala Ala Cys Pro Asp Leu Pro 165 170 175

Thr Tyr Cys Arg Ala Leu Arg Asn Leu Gly Ser Leu Leu Lys Pro Gly
180 185 190

Gly Phe Leu Val Ile Met Asp Ala Leu Lys Ser Ser Tyr Tyr Met Ile 195 200 205

Gly Glu Gln Lys Phe Ser Ser Leu Pro Leu Gly Arg Glu Ala Val Glu 210 215 220

Ala Ala Val Lys Glu Ala Gly Tyr Thr Ile Glu Trp Phe Glu Val Ile 225 230 235 240

Ser Gln Ser Tyr Ser Ser Thr Met Ala Asn Asn Glu Gly Leu Phe Ser 245 250 255

Leu Val Ala Arg Lys Leu Ser Arg Pro Leu 260 265

<sup>&</sup>lt;210> 1291

<sup>&</sup>lt;211> 112

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1291 Cys Gly Ser Thr Ile Leu Gln Gly Pro Gln Lys Ala Leu Arg Arg Gly Leu Gly Glu Val Gly Asp Gln Gly Lys Ser Arg Gln Arg Ala Ser Lys 20 Arg Leu Phe Ala Ser Lys Ala Leu Arg Gly His Leu Arg Pro Val Arg Gly Gln Gln Pro Gly Arg Xaa Gly Ser Asp Glu Asn Glu Glu Ser Ser Val Val Asp Tyr Val Glu Val Thr Val Gly Glu Glu Asp Ala Ile Ser 65 70 75 Asp Arg Ser Asp Ser Trp Ser Gln Ala Ala Ala Glu Gly Val Ser Glu Leu Ala Glu Ser Asp Ser Asp Cys Val Pro Ala Glu Ala Gly Gln Ala 105

<210> 1292 <211> 217 <212> PRT <213> Homo sapiens

<400> 1292

Gly Ser Thr His Ala Ser Gly Thr Met Arg Ala Ala Ala Ile Ser Thr 1 5 10 15

Pro Lys Leu Asp Lys Met Pro Gly Met Phe Phe Ser Ala Asn Pro Lys 20 25 30

Glu Leu Lys Gly Thr Thr His Ser Leu Leu Asp Asp Lys Met Gln Lys 35 40 45

Arg Arg Pro Lys Thr Phe Gly Met Asp Met Lys Ala Tyr Leu Arg Ser 50 55 60

1326

Met Ile Pro His Leu Glu Ser Gly Met Lys Ser Ser Lys Ser Lys Asp 70 .75 Val Leu Ser Ala Ala Glu Val Met Gln Trp Ser Gln Ser Leu Glu Lys 90 Leu Leu Ala Asn Gln Thr Gly Gln Asn Val Phe Gly Ser Phe Leu Lys 100 Ser Glu Phe Ser Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp 120 Tyr Lys Lys Thr Glu Ser Asp Leu Leu Pro Cys Lys Ala Glu Glu Ile 135 Tyr Lys Ala Phe Val His Ser Asp Ala Ala Lys Gln Ile Asn Ile Asp 155 Phe Arg Thr Arg Glu Ser Thr Ala Lys Lys Ile Lys Ala Pro Thr Pro 170 Thr Cys Phe Asp Glu Ala Gln Lys Val Ile Tyr Thr Leu Met Glu Lys 185 180 Asp Ser Tyr Pro Arg Phe Leu Lys Ser Asp Ile Tyr Leu Asn Leu Leu 200 205 195 Asn Asp Leu Gln Ala Asn Ser Leu Lys 210 215

<210> 1293

<211> 235

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1293

Leu His Leu Leu Ala Val Leu Glu Lys Met Ile Ser Gln Gly Asn Asn 1 5 10 15

Asn Lys Asn Gly Lys Asn Glu Thr Gly Asn Asn Asn Asn Lys Asp Gly 20 25 30

Ser Asn His Lys Ala Glu Ser Gly Ala Leu Ile Glu Ala Ala Lys Ser 35 40 45

Lys Ile His Gln Tyr Lys Val Arg Ala Tyr Ile Gln Met Lys Ser Leu 50 Lys Ala Cys Lys Arg Glu Ile Lys Ser Val Met Asn Thr Ala Gly Asn 70 75 Ser Ala Pro Ser Leu Phe Leu Lys Ser Asn Phe Glu Tyr Leu Arg Gly . 90 Asn Tyr Arg Lys Ala Val Lys Leu Leu Asn Ser Ser Asn Ile Ala Glu 105 110 100 His Pro Gly Phe Met Lys Thr Gly Glu Cys Leu Arg Cys Met Phe Trp 120 Asn Asn Leu Gly Cys Ile His Phe Ala Met Ser Lys His Asn Leu Gly 135 Ile Phe Tyr Phe Lys Lys Ala Leu Gln Glu Asn Asp Asn Val Cys Ala 145 150 Gln Leu Ser Ala Gly Ser Thr Asp Pro Gly Lys Lys Phe Ser Gly Arg 165 170 Pro Met Cys Thr Leu Leu Thr Asn Lys Arg Tyr Glu Leu Leu Tyr Asn . . 185 180 Cys Gly Ile Gln Leu Leu His Ile Gly Arg Pro Leu Ala Ala Phe Glu 200 195 Cys Leu Ile Glu Ala Val Gln Val Tyr His Ala Asn Pro Arg Leu Trp 215 220 Leu Arg Leu Ala Xaa Met Leu His Cys Cys Gln 230

<210>(1294

<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

1328

<222> (49) <223> Xaa equals any of the maturally occurring L-amino acids <220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1294 Ala Arg Gly Ala Arg Gly Arg Ala Leu Pro Ala Ser Gly Lys Ala Gly Arg Ala Arg Gly Ser Ala Xaa Gly Ser Ala Ala Arg Gly His Trp Ser 25 Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu 70 . 75 Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu 90 85 Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 105 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asn 120 115 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 135 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 155 150 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 170 165 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val

Arg Phe Gly Glu Tyr Gln Phe Len Met Glu Lys Glu Asp Gly Glu Ser

1329

Leu Glu Phe Phe Glu Thr Gln Phe Ile Leu Ser Pro Arg Ser Leu Leu 225 230 235 Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile Pro Glu Tyr Gly Thr 245 250 Tyr Ser Leu Cys Ser Ser Gln Ser Ser Ser Pro Thr Glu Met Asp Glu 265 Asn Glu Ser 275 <210> 1295 <211> 677 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1295 Met Thr Arg Leu Pro Lys Leu Trp Ala Arg Pro Ala Gly Lys Ala Leu 1 5 10 Val Ser Pro Val Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Gly Ile Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr Leu Glu Cys Gln Glu Ala Val Phe Asn Pro Gln Ser Arg Gly Pro Ala Phe Phe Ser Arg Val Arg 50 55 Arg Leu Thr His Leu Leu Val His Val Glu Pro Cys Glu Ala Pro Pro 65 70 Pro Val Val Ala Thr Pro Arg Pro Lys Gly Arg Asn Arg Ser His Asp 90

Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro Ser Ser Ile Met Arg Asn 105

100

PCT/US00/05882

Leu	Thr	Arg 115	Cys	Trp	Arg	Ala	Val 120	Val	Glu	Lys	Gln	Val 125	Asn	Asn	Phe
Leu	Thr 130	Ser	Ser	Trp	Arg	Asp 135	Asp	Asp	Phe	Val	Pro 140	Arg	Tyr	Суѕ	Xaa
His 145	Phe	Asn	Ile	Leu	Gln 150	Asn	Ser	Ser	Ser	Glu 155	Leu	Phe	Gly	Pro	Arg 160
Xaa	Ala	Phe	Leu	Leu 165	Ala	Leu	Gln	Asn	Gly 170	Cys	Ala	Gly	Ala	Leu 175	Leu
Lys	Leu	Pro	Phe 180	Leu	Lys	Ala	Ala	His 185	Val	Ser	Glu	Gln	Phe 190	Ala	Arç
His	Ile	Asp 195	Gln	Gln	Ile	Gln	Gly 200	Ser	Arg	Ile	Gly	Gly 205	Ala	Gln	Glu
Met	Glu 210	Arg	Leu	Ala	Gln	Leu 215	Gln	Gln	Cys	Leu	Gln 220	Ala	Val	Leu	Ile
Phe 225	Ser	Gly	Leu	Glu	11e 230	Ala	Thr	Thr	Phe	Glu 235	His	Tyr	Tyr	Gln	His 240
Tyr	Met	Ala	Asp	Arg 245	Leu	Leu	Gly	Val	Val 250	Ser	Ser	Trp	Leu	Glu 255	Gly
Ala	Val	Leu	Glu 260	Gln	Ile	Gly	Pro	Cys 265	Phe	Pro	Asn	Arg	Leu 270	Pro	Glr
Gln	Met	Leu 275	Gln	Ser	Leu	Ser	Thr 280	Ser	Lys	Glu	Leu	Gln 285	Arg	Gln	Ph€
	290		Gln			295					300				
305			Lys		310					315					320
His	Lys	Ser	Glu	Lys 325	Glu	Glu	Glu	Ala	Gly 330	Ala	Ala	Ala	Val	Val 335	Asp
Val	Ala	Glu	Gly 340	Glu	Glu	Glu	Glu	Glu 345	Glu	Asn	Glu	Asp	Leu 350	Tyr	Туг
Glu	Gly	Ala 355	Met	Pro	Glu	Val	Ser 360	Val	Leu	Val	Leu	Ser 365	Arg	His	Ser
rp	Pro 370	Val	Ala	Ser	Ile	Cys 375	His	Thr	Leu	Asn	Pro 380	Arg	Thr	Cys	Leu

Pro 385		Tyr	Leu	Arg	390	Thr	Leu	Asn	Arg	Tyr 395	Ser	Asn	Phe	Tyr	Asn 400
Lys	Ser	Gln	Ser	His 405	Pro	Ala	Leu	Glu	Arg 410	_	Ser	Gln	Arg	Arg 415	Leu
Gln	Trp	The	Trp 420		Gly	Trp	Ala	Glu 425	Leu	Gln	Phe	Gly	Asn 430	Gln	Thr
Leu	His	Val 435		Thr	Val	Gln	Met 440	Trp	Leu	Leu	Leu	Tyr 445	Leu	Asn	Asp
Leu	Lys 450	Ala	Val	Ser	Val	Glu 455	Ser	Leu	Leu	Ala	Phe 460	Ser	Gly	Leu	Ser
Ala 465	Asp	Met	Leu	Asn	Gln 470	Ala	Ile	Gly	Pro	Leu 475	Thr	Ser	Ser	Arg	Gly 480
Pro	Leu	Asp	Tea	Fis 485	Glu	Gln	Lys	Asp	Ile 490	Pro	Gly	Gly	Val	Leu 495	Lys
lle	Arg	Asp	Gly 500	Ser	Lys	Glu	Pro	Arg 505	ser	Arg	Trp	Asp	Ile 510	val	Arg
Leu	Ile	Pro 515	Pro	Gln	Thr	Tyr	Leu 520	Gln	Ala	Glu	Gly	Glu 525	Asp	Gly	Gln
Asn	Leu 530	Glu	Lys -	Arg	Arg	Asn 535	Leu 	- Fen	Asn	суз	Leu 540	Ile	Val	Arg	Ile 
Leu 545	Lys	Ala	His	Gly	Asp 550	<b>Gl</b> u	Gly	Leu	His	11e 555	Ąsp	Gln	Leu	Val	Cys 560
Leu	Val	Leu	Glu	Ala 565	Trp	Gln	Lys	Gly	Pro 570	Cys	Pro	Pro	Arg	Gly 575	Leu
Val	Ser	Ser	Leu 580	Gly	Lys	Gly	ser	Ala 585	Cys	ser	ser	Thr	Asp 590	Val	Leu
ser	Cys	Ile 595	Leu	His	Leu	Leu	600 Gly	Lys	Gly	Thr	Leu	Arg 605	Arg	His	Asp
qeA	Arg 610	Pro	Gln	Val	Leu	Ser 615	Tyr	Ala	Val	Pro	Val 620	Thr	Val	Met	Glu
Pro 525	His	Thr	Glu	Ser	Leu 630	Asn	Pro	Gly	Ser	Ser 635	Gly	Pro	Asn	Pro	Pro 640
Leu	Thr	Phe	His	Thr 645	Leu	Gln	Ile	_	Ser 650	Arg	Gly	Val	Pro	Tyr 655	Ala

Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr Ser Gly Ser Pro Arg Leu 660 . 665 670

Gly Val Arg Gly Arg 675

<210> 1296

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Thr Arg Glu Gly Ala Arg Wal Gly Gly Ala Arg Gly Gly Arg Asp 1 10 15

Gly Arg Lys Met Ala Thr Ala Thr Ile Ala Leu Gln Val Asn Gly Gln
20 25 30

Gln Gly Gly Ser Glu Pro Ala Ala Ala Ala Ala Val Val Ala Ala 35 40 45

Gly Asp Lys Trp Lys Pro Pro Gln Gly Thr Asp Ser Ile Lys Met Glu 50 55 60

Asn Gly Gln Ser Thr Ala Ala Lys Leu Gly Leu Pro Pro Leu Thr Pro 65 70 75 80

Glu Gln Gln Glu Ala Leu Gln Lys Ala Lys Lys Tyr Ala Met Glu Gln 85 90 95

Ser Ile Lys Ser Val Leu Val Lys Gln Thr Ile Ala His Gln Gln Gln
100 105 110

Gln Leu Thr Asn Leu Gln Met Ala Ala Val Thr Met Gly Phe Gly Asp 115 120 125

Pro Leu Ser Pro Leu Gln Ser Met Ala Ala Gln Arg Gln Arg Ala Leu 130 135 140

Ala Ile Met Cys Arg Val Tyr Val Gly Ser Ile Tyr Tyr Glu Leu Gly 145 150 155 160

Glu Asp Thr Ile Arg Gln Ala Phe Ala Pro Phe Gly Pro Ile Lys Ser 165 170 175

Ile Asp Met Ser Trp Asp Ser Val Thr Met Lys His Lys Gly Phe Ala 180 185 190

Phe Val Glu Tyr Glu Val Pro Glo Ala Ala Gln Leu Ala Leu Glu Gln

PCT/US00/05882

205 195 200 Met Asn Ser Val Met Leu Gly Gly Arg Asn Ile Lys Val Gly Arg Pro 215 Ser Asn Ile Gly Gln Ala Gln Pro Ile Ile Asp Gln Leu Ala Glu Glu 230 235 Ala Arg Ala Phe Asn Arg Ile Tyr Val Ala Ser Val His Gln Asp Leu 245 Ser Asp Asp Asp Ile Lys Ser Val Phe Glu Ala Phe Gly Lys Ile Lys 265 Ser Cys Thr Leu Ala Arg Asp Pro Thr Thr Gly Lys His Lys Gly Tyr 275 280 Gly Phe Ile Glu Tyr Glu Lys Ala Gln Ser Ser Gln Asp Ala Val Ser 290 295 Ser Met Asn Leu Phe Asp Leu Gly Gly Gln Tyr Leu Arg Val Gly Lys 310 315 Ala Val Thr Pro Pro Met Pro Leu Leu Thr Pro Ala Thr Pro Gly Gly Leu Pro Pro Ala Ala Ala Val Ala Ala Ala Ala Ala Thr Ala Lys Ile 340 Thr Ala Gln Glu Ala Val Ala Gly Ala Ala Val Leu Gly Thr Leu Gly Thr Pro Gly Leu Val Ser Pro Ala Leu Thr Leu Ala Gln Pro Leu Gly 375 Thr Leu Pro Gln Ala Val Met Ala Ala Gln Ala Pro Gly Val Ile Thr 385 390 395 Gly Val Thr Pro Ala Arg Pro Pro Ile Pro Val Thr Ile Pro Ser Val 410 Gly Val Val Asn Pro Ile Leu Ala Ser Pro Pro Thr Leu Gly Leu Leu 425 430 Glu Pro Lys Lys Glu Lys Glu Glu Glu Leu Phe Pro Glu Ser Glu 435 440 Arg Pro Glu Met Leu Ser Glu Gln Glu His Met Ser Ile Ser Gly Ser 455 Ser Ala Arg His Met Val Met Gln Lys Leu Leu Arg Lys Gln Glu Ser

1334

480 465 470 475 Thr Val Met Val Leu Arg Asn Met Val Asp Pro Lys Asp Ile Asp Asp 485 490 Asp Leu Glu Glu Val Thr Glu Glu Cys Gly Lys Phe Gly Ala Val 505 Asn Arg Val Ile Ile Tyr Gln Glu Lys Gln Gly Glu Glu Glu Asp Ala 515 520 Glu Ile Ile Val Lys Ile Phe Val Glu Phe Ser Ile Ala Ser Glu Thr 535 His Lys Ala Ile Gln Ala Leu Asn Gly Arg Trp Phe Ala Gly Arg Lys 555 550 Val Val Ala Glu Val Tyr Asp Gln Glu Arg Phe Asp Asn Ser Asp Leu 570 Ser Ala <210> 1297 <211> 179 <212> PRT <213> Homo sapiens <400> 1297 Pro Arg Gly Thr Ser Arg Arg Ser Ala Trp Pro Lys Met Ala Ala Ser 5 Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser Trp Ser Arg Glu 25 Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro Val Cys Ala Lys 35 Asn Arg Ala Ala Arg Val Arg Wal Ser Lys Gly Asp Lys Pro Val Thr Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His Arg Lys Gly Trp 75 Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp His Ala Ala Glu 85 Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met Trp Gly Thr Phe 100 105 110

Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg Gly Asn Gln
115 120 125

Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser Pro His Lys Tyr
130 135 140

Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser Tyr Phe Tyr Lys 145 150 155 160

Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser Lys Val Val Tyr 165 170 175

Lys Tyr Leu

WO 00/55350

<210> 1298

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1298

Gly Leu Val Thr Ile Phe Gly Cys Pro Ser Arg Glu Lys Gly Arg Met
1 5 10 15

Pro Leu Glu Ser Ser Ser Ser Met Pro Leu Ser Phe Pro Ser Leu Leu 20 25 30

Pro Ser Val Pro His Asn Thr Asn Pro Ser Pro Pro Leu Met Ser Tyr 35 40 . 45

Ile Thr Ser Gln Glu Met Lys Cys Ile Leu His Trp Phe Ala Asn Trp 50 55 60

Ser Gly Pro Gln Arg Glu Arg Phe Leu Glu Asp Leu Val Ala Lys Ala 65 70 75 80

Val Pro Glu Lys Leu Gln Pro Leu Leu Asp Ser Leu Glu Gln Leu Ser 85 90 95

Val Ser Gly Ala Asp Arg Pro Pro Ser Ile Phe Glu Cys Gln Leu His
100 105 110

Leu Trp Asp Gln Trp Phe Arg Gly Trp Ala Glu Gln Glu Arg Asn Glu 115 120 125

Phe Val Arg Gln Leu Glu Ph Ser Glu Pro Asp Phe Val Ala Lys Phe 130 135 140

Tyr Gln Ala Val Ala Ala Thr Ala Gly Lys Asp 145 150 155

<210> 1299

<211> 449

<212> PRT

<213> Homo sapiens

<400> 1299

Ser Asn Arg Lys Phe Ile Pro His Gln Leu Leu Val Ala Ile Asp Leu 1 5 10 15

Leu Ala Arg Gln Ala Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn 20 25 30

Thr Asp Glu Leu Gly Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser 35 40 45

Met Ser Ser Lys Ile Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met 50 55 60

Val Val Asp Ala Val Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln
65 70 75 80

Pro Arg Tyr Pro Val Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg 85 90 95

Ser Gln Met Glu Ser Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val 100 105 110

Val Gly Ser Gln Gly Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala 115 120 125

Cys Leu Asp Phe Ser Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln 130 135 140

Val Val Ile Thr Asp Pro Glu Lys Leu Asp Gln Ile Arg Gln Arg Glu 145 150 155 160

Ser Asp Ile Thr Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala 165 170 175

Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr 180 185 190

Phe Val Glu Ala Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp 195 200 205

Leu Lys Arg Ile Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu

1337

	210					215					220				
Ala 225	Asn	Leu	Glu	Gly	Glu 230	Glu	Thr	Phe	Glu	Ala 235	Ala	Met	Leu	Gly	Gln 240
Ala	Glu	Glu	Val	Val 245	Gln	Glu	Arg	Ile	Cys 250	Asp	Asp	Glu	Leu	Ile 255	Leu
Ile	Lys	Asn	Thr 260	Lys	Ala	Arg	Thr	Ser 265	Ala	Ser	Ile	Ile	Leu 270	Arg	Gly
Ala	Asn	Asp 275	Phe	Met	Cys	Asp	Glu 280	Met	Glu	Arg	Ser	Leu 285	His	Asp	Ala
Leu	Сув 290	Val	Val	Lys	Arg	Val 295	Leu	Glu	Ser	Lys	Ser 300	Val	Val	Pro	Gly
Gly 305	Gly	Ala	Val	Glu	Ala 310	Ala	Leu	Ser	Ile	Tyr 315	Leu	Glu	Asn	туг	Ala 320
Thr	Ser	Met	Gly	Ser 325	Arg	Glu	Gln	Leu	Ala 330	Ile	Ala	Glu	Phe	Ala 335	Arg
Ser	Leu	Leu	Val 340	Ile	Pro	Asn	Thr	Leu 345	Ala	Val	Asn	Ala	Ala 350	Gln	Asp
Ser	Thr	Asp 355	Ļeu	Val	Ala	Lys	Leu 360	Arg	Ala	Phe	His	Asn 365	Glu	Ala	Gln
Val	Asn 370	Pro	Glu	Arg	Lys	Asn 375	Leu	Lys	Trp	Ile	Gly 380	Leu	Asp	Leu	Ser
Asn 385	Gly	Lys	Pro	Arg	Asp 390	Asn	Lys	Gln	Ala	Gly 395	Val	Phe	Glu	Pro	Thr 400
Ile	Val	Lys	Val	Lys 405	Ser	Leu	Lys	Phe	Ala 410	Thr	Glu	Ala	Ala	Ile 415	Thr
Ile	Leu	Arg	Ile 420	Asp	Asp	Leu	Ile	Lys 425	Leu	His	Pro	Glu	Ser 430	Lys	Asp
Asp	Lys	His 435	Gly	Ser	Tyr	Glu	Asp 440	Ala	Val	His	Ser	Gly 445	Ala	Leu	Asn

Asp

1338

<212> PRT

<213> Homo sapiens

<400> 1300

Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe 1 5 10 15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro 20 25 30

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile 35 40 45

Arg Phe Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln 50 55 60

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu 65 70 75 80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu 85 90 95

<210> 1301

<211> 332

<212> PRT

<213> Homo sapiens

<400> 1301

Gly Glu Pro Lys Met Thr Gly Ser Asn Glu Phe Lys Leu Asn Gln Pro 1 5 10 15

Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr Ser Gln
. 20 25 30

Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val 35 40 45

Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala Val Leu 50 55 60

Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly Leu Asp 65 70 75 80

His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn Leu Val 85 90 95

Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu Tyr Cys Pro Glu Val 100 105 Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr Val Lys Leu Trp Asp 120 Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser Gln Pro Glu Lys Val 130 135 Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile Val Gly Thr Ala Gly 150 155 Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met Gly Tyr Val Gln Gln 170 Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg Cys Ile Arg Ala Phe 180 185 Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile Glu Gly Arg Val Ala Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln Lys Lys Lys Tyr Ala 215 Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile Glu Gln Ile Tyr Pro 235 230 Val Asn Ala Ile Ser Phe His Asn Ile His Asn Thr Phe Ala Thr Gly 250 Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro Phe Asn Lys Lys Arg 260 265 270 Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile Ala Ser Leu Ala Phe 275 Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser Ser Tyr Met Tyr Glu 295 Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile Phe Ile Arg Gln Val

315

330

320

<210> 1302

<211> 565

305

<212> PRT

<213> Homo sapiens

310

325

Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr

<400> 1302 Leu His Cys Thr Met Cys Gly Ile Trp Ala Leu Phe Gly Ser Asp Asp 10 Cys Leu Ser Val Gln Cys Leu Ser Ala Met Lys Ile Ala His Arg Gly 25 Pro Asp Ala Phe Arg Phe Glu Asn Val Asn Gly Tyr Thr Asn Cys Cys Phe Gly Phe His Arg Leu Ala Val Val Asp Pro Leu Phe Gly Met Gln Pro Ile Arg Val Lys Lys Tyr Pro Tyr Leu Trp Leu Cys Tyr Asn Gly 70 Glu Ile Tyr Asn His Lys Lys Met Gln Gln His Phe Glu Phe Glu Tyr 85 Gln Thr Lys Val Asp Gly Glu Ile Ile Leu His Leu Tyr Asp Lys Gly 100 105 Gly Ile Glu Gln Thr Ile Cys Met Leu Asp Gly Val Phe Ala Phe Val 120 Leu Leu Asp Thr Ala Asn Lys Lys Val Phe Leu Gly Arg Asp Thr Tyr 130 Gly Val Arg Pro Leu Phe Lys Ala Met Thr Glu Asp Gly Phe Leu Ala 150 155 Val Cys Ser Glu Ala Lys Gly Leu Val Thr Leu Lys His Ser Ala Thr 170 Pro Phe Leu Lys Val Glu Pro Phe Leu Pro Gly His Tyr Glu Val Leu 180 185 Asp Leu Lys Pro Asn Gly Lys Val Ala Ser Val Glu Met Val Lys Tyr His His Cys Arq Asp Glu Pro Leu His Ala Leu Tyr Asp Asn Val Glu 215 Lys Leu Phe Pro Gly Phe Glu Ile Glu Thr Val Lys Asn Asn Leu Arg 225 235 230 Ile Leu Phe Asn Asn Ala Val Lys Lys Arg Leu Met Thr Asp Arg Arg 250 245

Ile Gly Cys Leu Leu Ser Gly Gly Leu Asp Ser Ser Leu Val Ala Ala

WO 00/55350

260

1341

265

270

Thr Leu Leu Lys Gln Leu Lys Glu Ala Gln Val Gln Tyr Pro Leu Gln 280 Thr Phe Ala Ile Gly Met Glu Asp Ser Pro Asp Leu Leu Ala Ala Arg 295 Lys Val Ala Asp His Ile Gly Ser Glu His Tyr Glu Val Leu Phe Asn Ser Glu Glu Gly Ile Gln Ala Leu Asp Glu Val Ile Phe Ser Leu Glu Thr Tyr Asp Ile Thr Thr Val Arg Ala Ser Val Gly Met Tyr Leu Ile 345 340 Ser Lys Tyr Ile Arg Lys Asn Thr Asp Ser Val Val Ile Phe Ser Gly 355 Glu Gly Ser Asp Glu Leu Thr Gln Gly Tyr Ile Tyr Phe His Lys Ala 375 Pro Ser Pro Glu Lys Ala Glu Glu Glu Ser Glu Arg Leu Leu Arg Glu 390 395 Leu Tyr Leu Phe Asp Val Leu Arg Ala Asp Arg Thr Thr Ala Ala His 405 Gly Leu Glu Leu Arg Val Pro Phe Leu Asp His Arg Phe Ser Ser Tyr 425 420 Tyr Leu Ser Leu Pro Pro Glu Met Arg Ile Pro Lys Asn Gly Ile Glu 440 Lys His Leu Leu Arg Glu Thr Phe Glu Asp Ser Asn Leu Ile Pro Lys 450 455 Glu Ile Leu Trp Arg Pro Lys Glu Ala Phe Ser Asp Gly Ile Thr Ser 475 Val Lys Asn Ser Trp Phe Lys Ile Leu Gln Glu Tyr Val Glu His Gln 485 Val Asp Asp Ala Met Met Ala Asn Ala Gln Lys Phe Pro Phe Asn 500 505 Thr Pro Lys Thr Lys Glu Gly Tyr Tyr Tyr Arg Gln Val Phe Glu Arg 520 . His Tyr Pro Gly Arg Ala Asp Trp Leu Ser His Tyr Trp Met Pro Lys

PCT/US00/05882 WO 00/55350

1342

540 530 535 Trp Ile Asn Ala Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys 550 555 Ser Ala Val Lys Ala <210> 1303 <211> 441 <212> PRT <213> Homo sapiens <400> 1303 Arg Arg Arg Ala Cys Arg Ser Ala Glu Gly Thr Gly Leu Arg Ser - 10 Leu Leu Pro Pro Arg Leu Gln Leu Pro Ala Gly Pro Phe Ser Arg 20 25 Cys Arg Trp Asp Pro Val Ser Ser Pro Arg Pro Ser Thr Met Pro Pro 40 Lys Lys Gly Gly Asp Gly Ile Lys Pro Pro Pro Ile Ile Gly Arg Phe 55 Gly Thr Ser Leu Lys Ile Gly Ile Val Gly Leu Pro Asn Val Gly Lys 70 65 Ser Thr Phe Phe Asn Val Leu Thr Asn Ser Gln Ala Ser Ala Glu Asn 85 Phe Pro Phe Cys Thr Ile Asp Pro Asn Glu Ser Arg Val Pro Val Pro 105 100 Asp Glu Arg Phe Asp Phe Leu Cys Gln Tyr His Lys Pro Ala Ser Lys 115 120 Ile Pro Ala Phe Leu Asn Val Val Asp Ile Ala Gly Leu Val Lys Gly 135 Ala His Asn Gly Gln Gly Leu Gly Asn Ala Phe Leu Ser His Ile Ser 150 155 Ala Cys Asp Gly Ile Phe His Leu Thr Arg Ala Ph Glu Asp Asp Asp 165

Ile Thr His Val Glu Gly Ser Val Asp Pro Ile Arg Asp Ile Glu Ile 185

180

Ile His Glu Glu Leu Gln Leu Lys Asp Glu Glu Met Ile Gly Pro Ile 195 200 205 Ile Asp Lys Leu Glu Lys Val Ala Val Arg Gly Gly Asp Lys Lys Leu 215 Lys Pro Glu Tyr Asp Ile Met Cys Lys Val Lys Ser Trp Val Ile Asp 230 235 Gln Lys Lys Pro Val Arg Phe Tyr His Asp Trp Asn Asp Lys Glu Ile 245 250 Glu Val Leu Asn Lys His Leu Phe Leu Thr Ser Lys Pro Met Val Tyr 265 Leu Val Asn Leu Ser Glu Lys Asp Tyr Ile Arg Lys Lys Asn Lys Trp Leu Ile Lys Ile Lys Glu Trp Val Asp Lys Tyr Asp Pro Gly Ala Leu 290 295 Val Ile Pro Phe Ser Gly Ala Leu Glu Leu Lys Leu Gln Glu Leu Ser 305 315 Ala Glu Glu Arg Gln Lys Tyr Leu Glu Ala Asn Met Thr Gln Ser Ala 330 325 Leu Pro Lys Ile Ile Lys Ala Gly Phe Ala Ala Leu Gln Leu Glu Tyr Phe Phe Thr Ala Gly Pro Asp Glu Val Arg Ala Trp Thr Ile Arg Lys Gly Thr Lys Ala Pro Gln Ala Ala Gly Lys Ile His Thr Asp Phe Glu 375 Lys Gly Phe Ile Met Ala Glu Val Met Lys Tyr Glu Asp Phe Lys Glu 385 395 390 Glu Gly Ser Glu Asn Ala Val Lys Ala Ala Gly Lys Tyr Arg Gln Gln 405 410 Gly Arg Asn Tyr Ile Val Glu Asp Gly Asp Ile Ile Phe Phe Lys Phe 425 Asn Thr Pro Gln Gln Pro Lys Lys 435 440

1344

<210> 1304

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1304

Glu Lys Lys Arg Gly Arg Glu Asp Lys Pro Gly Thr Met Ala Thr Phe 1 5 10 15

Pro Pro Ala Thr Ser Ala Pro Gln Gln Pro Pro Gly Pro Glu Asp Glu 20 25 30

Asp Ser Ser Leu Asp Glu Ser Asp Leu Tyr Ser Leu Ala His Ser Tyr 35 40 45

Leu Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu Ala Ala 50 55 60

Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys Leu Val Thr 65 70 75 80

Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg Arg 85 90

<210> 1305 -

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1305

Val Ile Leu Glu Met Val Ile Val Phe Cys Leu Val Thr Phe Ala Thr 1 5 10 15

Val Pro Phe Lys Thr Met Trp Lys Pro Gln Val Cys Gly Gln His Arg
20 25 30

Trp Asn Asp Ile Leu Cys Phe Leu Arg Leu Pro Ser Thr Arg His Ile 35 40 45

Ser Leu Val Leu Gln Met Ser Ala Gln Val Leu Val Thr Ser Phe Ser 50 55 60

Cys Cys Pro Gly Lys Ser Val Cys Ala Gly Ala Gly Ala Leu Ala Leu 65 70 75 80

Phe Arg

<210> 1306 <211> 231 <212> PRT <213> Homo sapiens <400> 1306 Ala Arg Glu Met Ala Ala Gln Gln Arg Asp Cys Gly Gly Ala Ala Gln Leu Ala Gly Pro Ala Ala Glu Ala Asp Pro Leu Gly Arg Phe Thr Cys 25 Pro Val Cys Leu Glu Val Tyr Glu Lys Pro Val Gln Val Pro Cys Gly 40 His Val Phe Cys Ser Ala Cys Leu Gln Glu Cys Leu Lys Pro Lys Lys Pro Val Cys Gly Val Cys Arg Ser Ala Leu Ala Pro Gly Val Arg Ala 70 75 Val Glu Leu Glu Arg Gln Ile Glu Ser Thr Glu Thr Ser Cys His Gly 85 Cys Arg Lys Asn Phe Phe Leu Ser Lys Ile Arg Ser His Val Ala Thr 105 Cys Ser Lys Tyr Gln Asn Tyr Ile Met Glu Gly Val Lys Ala Thr Ile 120 ... 115 Lys Asp Ala Ser Leu Gln Pro Arg Asn Val Pro Asn Arg Tyr Thr Phe 130 135 Pro Cys Pro Tyr Cys Pro Glu Lys Asn Phe Asp Gln Glu Gly Leu Val 155 Glu His Cys Lys Leu Phe His Ser Thr Asp Thr Lys Ser Val Val Cys 165 170 Pro Ile Cys Ala Ser Met Pro Trp Gly Asp Pro Asn Tyr Arg Ser Ala 185 180 Asn Phe Arg Glu His Ile Gln Arg Arg His Arg Phe Ser Tyr Asp Thr 200 Phe Val Asp Tyr Asp Val Asp Glu Glu Asp M t Met Asn Gln Val Leu 210 220 Gln Arg Ser Ile Ile Asp Gln 230

225

<210> 1307 <211> 170 <212> PRT <213> Homo sapiens <400> 1307 Gln Lys Gln Arg Thr Phe Trp Lys Tyr Tyr Tyr Asp Gly Lys Asp Tyr Ile Glu Phe Asn Lys Glu Ile Pro Ala Trp Val Pro Phe Asp Pro Ala 25 Ala Gln Ile Thr Lys Gln Lys Trp Glu Ala Glu Pro Val Tyr Val Gln 40 Arg Ala Lys Ala Tyr Leu Glu Glu Glu Cys Pro Ala Thr Leu Arg Lys Tyr Leu Lys Tyr Ser Lys Asn Ile Leu Asp Arg Gln Asp Pro Pro Ser 75 . 70 Val Val Thr Ser His Gln Ala Pro Gly Glu Lys Lys Lys Leu Lys 85 90 Cys Leu Ala Tyr Asp Phe Tyr Pro Gly Lys Ile Asp Val His Trp Thr 105 Arg Ala Gly Glu Val Gln Glu Pro Glu Leu Arg Gly Asp Val Leu His 120 Asn Gly Asn Gly Thr Tyr Gln Ser Trp Val Val Val Ala Val Pro Pro 130 135 Gln Asp Thr Ala Pro Tyr Ser Cys His Val Gln His Ser Ser Leu Ala 155

170

<210> 1308

<211> 111

<212> PRT

<213> Homo sapiens

Gln Pro Leu Val Val Pro Trp Glu Ala Ser 165

<220>

<221> SITE

Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn 50 55 60

Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His
65 70 75 80

Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Xaa Arg 85 90 95

Pro Gly Ile Gly Ala Thr His Xaa Ser Arg Phe Ile Pro Leu Lys 100 105 110

<210> 1309

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1309

Pro Val Ser Pro Gln Glu Arg Pro Pro Pro Tyr Leu Ala Val Pro Gly
1 5 10 15

His Gly Glu Glu Tyr Pro Val Ala Gly Ala His Ser Ser Pro Pro Lys 20 25 30

Ala Arg Phe Leu Arg Val Pro Ser Glu His Pro Tyr Leu Thr Pro Ser 35 40 45

Pro Glu Ser Pro Glu His Trp Ala Ser Pro Ser Pro Pro Ser Leu Ser 50 55 60

Asp Trp Ser Glu Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met

1348

65 70 75 80 Ala Thr Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val 85 90 Pro Ser Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu 105 Val Thr Pro Lys Arg Gln Val Leu Ala 115 120 <210> 1310 <211> 206 <212> PRT · <213> Homo sapiens <400> 1310 Gln Cys Pro Gly Arg Ala Gly Ala Pro Gln Thr Arg Ala Pro Arg Ala 5 Arg Glu Arg Gly Gly Ala Met Ala Thr Ala Asn Gly Ala Val Glu Asn 25 Gly Gln Pro Asp Arg Lys Pro Pro Ala Leu Pro Arg Pro Ile Arg Asn 40 Leu Glu Val Lys Phe Thr Lys Ile Phe Ile Asn Asn Glu Trp His Glu 55 60 · 50 . Ser Lys Ser Gly Lys Lys Phe Ala Thr Cys Asn Pro Ser Thr Arg Glu 75 Gln Ile Cys Glu Val Glu Glu Gly Asp Lys Pro Asp Val Asp Lys Ala Val Glu Ala Ala Gln Val Ala Phe Gln Arg Gly Ser Pro Trp Arg Arg 100 Leu Asp Ala Leu Ser Arg Gly Arg Leu Leu His Gln Leu Ala Asp Leu 120 115 Val Glu Arg Asp Arg Ala Thr Leu Ala Ala Leu Glu Thr Met Asp Thr 135 Gly Lys Pro Phe Leu His Ala Phe Phe Il Asp Leu Glu Gly Cys Ile

Arg Thr Leu Arg Tyr Phe Ala Gly Trp Ala Asp Lys Ile Gln Gly Lys

165

170

145

1349

Thr Ile Pro Thr Asp Asp Asn Val Cys Ala Ser Pro Gly Met Ser Pro 180 : 185 190

Leu Val Ser Val Gly Pro Ser Leu His Gly Thr Ser Pro Cys 195 200 205

<210> 1311

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1311

Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser 1 5 10 15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser 20 25 30

Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr 35 40 45

Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val 50 . 55 60

Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala 65 70 75 80

Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe
85 90 95

Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln
100 105 110

Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly 115 120 125

Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met 130 135 140

<210> 1312

<211> 495

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (121) <223> Xaa equals any of the maturally occurring L-amino acids <220> <221> SITE <222> (392) <223> Xaa equals any of the maturally occurring L-amino acids <220> <221> SITE <222> (460) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1312 Arg Arg Met Glu Gly Gln Asp Glu Val Ser Ala Arg Glu Gln His Phe His Ser Gln Val Arg Glu Ser Thr Ile Cys Phe Leu Leu Phe Ala Ile 20 25 Leu Tyr Val Val Ser Tyr Phe Ile Ile Thr Arg Tyr Lys Arg Lys Ser Asp Glu Gln Glu Asp Glu Asp Ala Ile Val Asn Arg Ile Ser Leu Phe 55 Leu Ser Thr Phe Thr Leu Ala Val Ser Ala Gly Ala Val Leu Leu Leu 65 70 75 Pro Phe Ser Ile Ile Ser Asn Glu Ile Leu Leu Ser Phe Pro Gln Asn Tyr Tyr Ile Gln Trp Leu Asn Gly Ser Leu Ile His Gly Leu Trp Asn 105 Leu Ala Ser Leu Phe Ser Asn Leu Xaa Leu Phe Val Leu Met Pro Phe 120 115 Ala Phe Phe Leu Glu Ser Glu Gly Phe Ala Gly Leu Lys Lys Gly 135 Ile Arg Ala Arg Ile Leu Glu Thr Leu Val Met Leu Leu Leu Leu Ala 155 150 Leu Leu Ile Leu Gly Ile Val Trp Val Ala Ser Ala Leu Ile Asp Asn 165 Asp Ala Ala Ser Met Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu 185 Pro Tyr Leu Tyr Ser Cys Ile Ser Leu Met Gly Cys L u Leu Leu

		195					200					205			
Leu	Cys 210	Thr	Pro	Val	Gly	Leu 215		Arg	Met	Phe	Thr 220	Val	Met	Gly	Gln
Leu 225	Leu	Val	Lys	Pro	Thr 230	Ile	Leu	Glu	Asp	Leu 235	Asp	Glu	Gln	Ile	Туг 240
Ile	Ile	Thr	Leu	Glu 245	Glu	Glu	Ala	Leu	Gln 250	Arg	Arg	Leu	Asn	Gly 255	Leu
Ser	Ser	Ser	Val 260	Glu	Tyr	Asn	Ile	Met 265	Ģlu	Leu	Glu	Gln	Glu 270	Leu	Glu
Asn	Val	Lys 275	Thr	Leu	Lys	Thr	<b>L</b> ys <b>2</b> 80	Leu	Asp	Pro	Trp	Ser 285	Ser	Phe	Ser
Val	Leu 290	Gln	Ser	Pro	Val	Trp 295	His	Phe	Ala	Ala	Gln 300	Thr	Pro	Ala	Asp
Ile 305	Val	Ser	Pro	Asp	Ser 310	His	Phe	Met	Leu	Ser 315	Thr	Gln	Gly	Met	Ser 320
Trp	Ala	Gln	Leu	Val 325	Phe	Leu	Leu	Pro	Ala 330	Ser	Arg	Pro	Gly	Asn 335	Ser
Gln	Asp	Lys	Arg 340	Arg	Lys	Lys	Ala	Ser 345	Ala	Trp	Glu	Arg	Asn 350	Leu	Val
Tyr	Pro	Ala 355	Val	Met	Val	Leu	Leu 360	Leu	Ile	Glu	Thr	ser 365	Ile	Ser	Val
Leu	Leu 370	Val	Ala	Cys	Asn	Ile 375	Leu	Суѕ	Leu	Leu	Val 380	Asp	Glu	Thr	Ala
Met 385	Pro	Lys	Gly	Thr	Arg 390	Gly	<b>Xa</b> a	Gly	Ile	Gly 395	Asn	Ala	Ser	Leu	Ser 400
Thr	Phe	Gly	Phe	Val 405	Gly	Ala	Ala	Leu	Glu 410	Ile	Ile	Leu	Ile	Phe 415	Tyr
Leu	Met	Val	Ser 420	Ser	Val	Val	Gly	Phe 425	Tyr	Ser	Leu	Arg	Phe 430	Phe	Gly
Asn	Phe	Thr 435	Pro	Lys	Lys	Asp	Asp 440	Thr	Thr	Met	Thr	Lys 445	Ile	Ile	Gly
Asn	Cys 450	Val	Ser	Ile	Leu	Val 455	Leu	Ser	Ser	Ala	Xaa 460	Pro	Val	Met	Ser
Arg	Thr	Leu	Gly	Leu	His	Lys	Leu	His	Leu	Pro	Asn	Thr	Ser	Arg	Asp

1352

465 470 475 480 Ser Glu Thr Ala Lys Pro Ser Val Asn Gly His Gln Lys Ala Leu 485 490 <210> 1313 <211> 790 <212> PRT <213> Homo sapiens <400> 1313 Gly Thr Arg Gly Thr Ala Thr Glu Arg Leu Lys Met Ile Pro Phe Leu Pro Met Phe Ser Leu Leu Leu Leu Ile Val Asn Pro Ile Asn Ala 25 Asn Asn His Tyr Asp Lys Ile Leu Ala His Ser Arg Ile Arg Gly Arg 35 40 Asp Gln Gly Pro Asn Val Cys Ala Leu Gln Gln Ile Leu Gly Thr Lys Lys Lys Tyr Phe Ser Thr Cys Lys Asn Trp Tyr Lys Lys Ser Ile Cys 70 Gly Gln Lys Thr Thr Val Leu Tyr Glu Cys Cys Pro Gly Tyr Met Arg Met Glu Gly Met Lys Gly Cys Pro Ala Val Leu Pro Ile Asp His Val 105 Tyr Gly Thr Leu Gly Ile Val Gly Ala Thr Thr Thr Gln Arg Tyr Ser 120 Asp Ala Ser Lys Leu Arg Glu Glu Ile Glu Gly Lys Gly Ser Phe Thr 130 135 140 Tyr Phe Ala Pro Ser Asn Glu Ala Trp Asp Asn Leu Asp Ser Asp Ile Arg Arg Gly Leu Glu Ser Asn Val Asn Val Glu Leu Leu Asn Ala Leu 170 His Ser His Met Ile Asn Lys Arg Met Leu Thr Lys Asp Leu Lys Asn 180 185 Gly Met Ile Ile Pro Ser Met Tyr Asn Asn Leu Gly Leu Phe Ile Asn

200

205

His Tyr Pro Asn Gly Val Val Thr Val Asn Cys Ala Arg Ile Ile His

WO 00/55350 PCT/US00/05882

	210					215					220				
Gly 225	Asn	Gln	Ile	Ala	Thr 230	Asn	Gly	Val	Val	His 235	Val	Ile	Asp	Arg	Va:
Leu	Thr	Gln	Ile	Gly 245	Thr	Ser	Ile	Gln	Asp 250	Phe	Ile	Glu	Ala	Glu 255	Ası
Asp	Leu	Ser	Ser 260	Phe	Arg	Ala	Ala	Ala 265	Ile	Thr	Ser	Asp	Ile 270	Leu	Glı
Ala	Leu	Gly 275	Arg	Asp	Gly	His	Phe 280	Thr	Leu	Phe	Ala	Pro 285	Thr	Asn	Glu
Ala	Phe 290	Glu	Lys	Leu	Pro	Arg 295	Gly	Val	Leu	Glu	Arg 300	Ile	Met	Gly	Asp
Lys 305	Val	Ala	Ser	Glu	Ala 310	Leu	Met	Lys	Tyr	His 315	Ile	Leu	Asn	Thr	Let 320
Gln	Суз	Ser	Glu	Ser 325	Ile	Met	Gly	Gly	Ala 330	Val	Phe	Glu	Thr	Leu 335	Glu
Gly	Asn	Thr	Ile 340		Ile	Gly	Cys	Asp 345	Gly	Asp	Ser	Ile	Thr 350	Val	Asr
Gly	Ile	Lys 355	Met	Val	Asn	Lys	Lys 360	Asp	Ile	Val	Thr	Asn 365	Asn	Gly	Val
Ile	His 370	Leu	Ile	Asp	Gln	Val 375	Leu	Ile	Pro	Asp	Ser 380	Ala	Lys	Gln	Va]
11e 385	Glu	Leu	Ala	Gly	190	Gln	Gln	Thr	Thr	Phe 395	Thr	Asp	Leu	Val	Ala 400
Gln	Leu	Gly	Leu	Ala 405	Ser	Ala	Leu	Arg	Pro 410	Asp	Gly	Glu	Tyr	Thr 415	Leu
Leu	Ala	Pro	Val 420	Asn	Asn	Ala	Phe	Ser 425	Asp	Asp	Thr	Leu	Ser 430	Met	Asp
Gln	Arg	Leu 435	Leu	Lys	Leu	Ile	Leu 440	Gln	Asn	His	Ile	Leu 445	Lys	Val	Lys
Val	Gly 450	Leu	Asn	Glu	Leu	Tyr 455	Asn	Gly	Gln	11	Leu 460	Glu	Thr	Ile	Gly
Gly 465	Lys	Gln	Leu	Arg	Val 470	Phe	Val	Tyr	Arg	Thr 475	Ala	Val	Cys	Ile	Glu 480

Asn Ser Cys Met Glu Lys Gly Ser Lys Gln Gly Arg Asn Gly Ala Ile His Ile Phe Arg Glu Ile Ile Lys Pro Ala Glu Lys Ser Leu His Glu Lys Leu Lys Gln Asp Lys Arg Phe Ser Thr Phe Leu Ser Leu Leu Glu Ala Ala Asp Leu Lys Glu Leu Leu Thr Gln Pro Gly Asp Trp Thr Leu Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met Thr Ser Glu Glu Lys Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln Asn Ile Ile Leu Tyr His Leu Thr Pro Gly Val Phe Ile Gly Lys Gly Phe Glu Pro Gly Val Thr Asn Ile Leu Lys Thr Thr Gln Gly Ser Lys Ile Phe Leu Lys Glu Val Asn Asp Thr Leu Leu Val Asn Glu Leu Lys Ser Lys Glu Ser Asp Ile Met Thr Thr Asn Gly Val Ile His Val Val Asp Lys Leu Leu Tyr Pro Ala Asp Thr Pro Val Gly Asn Asp Gln Leu Leu Glu Ile Leu Asn Lys Leu Ile Lys Tyr Ile Gln Ile Lys Phe Val Arg Gly Ser Thr Phe Lys Glu Ile Pro Val Thr Val Tyr Lys Pro Ile Ile Lys Lys Tyr Thr Lys Ile Ile Asp Gly Val Pro Val Glu Ile Thr Glu Lys Glu Thr Arg Glu Glu Arg Ile Ile Thr Gly Pro Glu Ile Lys Tyr Thr Arg Ile Ser Thr Gly Gly Glu Thr Glu Glu Thr Leu Lys Lys Leu Leu Gln Glu Glu Val Thr Lys Val Thr Lys Phe Ile Glu Gly Gly Asp Gly His Leu 

Phe Glu Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val 755 760 765

Arg Lys Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Leu 770 780

Arg Glu Gly Arg Ser Gln 785 790

<210> 1314

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1314

Thr Ser Trp Ala Phe Asp Glu Thr Gly Xaa Asn Thr Ala Val Phe Leu
1 5 10 15

Leu Glu Ile Xaa Trp Gly Ile Phe Phe Glu Leu Met Gly Thr Ile Arg
20 25 30

His Asn Cys Leu His Lys Leu Gly Ile Xaa Asp Phe Gly Ile Thr Ile
35 40 45

Tyr Gln Asn Gly Asp Ile Ser Pro Leu Val Leu Arg Cys Lys Pro Lys 50 55 60

Asn Ile Met Thr Ser Phe Gln Ala Ser 65 70

<211>	268	
<212>	PRT	
<213>	Homo sapier	3
<400>	1315	
Pro Gl	ly Arg Pro S	r
1		

WO 00/55350

Pro Gly Arg Pro Thr Arg Pro Arg Thr Arg Gly Ile Asn Lys Leu Ile
1 5 10 15

Arg Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu 20 25 30

Lys Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala 35 40 45

Ile Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile
50 55 60

Leu Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu 65 70 75 80

Glu Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Tyr Lys 85 90 95

Arg Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Val Ser Asp 100 105 110

Pro Ser Ile Leu Asp Ser Leu Asp Leu Asn Glu Asp Glu Arg Glu Val

Leu Ile Asn Asn Ile Asn Arg Arg Leu Thr Pro Gln Ala Val Lys Ile 130 135 140

Arg Ala Asp Ile Glu Val Ala Cys Tyr Gly Tyr Glu Gly Ile Asp Ala 145 150 155 160

Val Lys Glu Ala Leu Arg Ala Gly Leu Asn Cys Ser Thr Glu Asn Met 165 170 175

Pro Ile Lys Ile Asn Leu Ile Ala Pro Pro Arg Tyr Val Met Thr Thr 180 185 190

Thr Thr Leu Glu Arg Thr Glu Gly Leu Ser Val Leu Ser Gln Ala Met 195 200 205

Ala Val Ile Lys Glu Lys Ile Glu Glu Lys Arg Gly Val Phe Asn Val 210 215 220

Gln Met Glu Pro Lys Val Val Thr Asp Thr Asp Glu Thr Glu Leu Ala 225 230 235 240

Arg Gln Met Glu Arg Leu Glu Arg Glu Asn Ala Glu Val Asp Gly Asp

1357

245 250 255

Asp Asp Ala Glu Glu Met Glu Ala Lys Ala Glu Asp 260 265

<210> 1316

<211> 315

<212> PRT

<213> Homo sapiens

<400> 1316

Gly Gln Arg Ala Gly Met Pro His Ala Gln Gly Gly Trp Ser Gly Pro 1 . . . 5 10 15

Ala Ala Asp Ser Ala Glu Pro Ala Leu Pro Ala Gly Glu Pro Gly Gly
20 25 30

Pro Thr Leu Met Arg Leu Asn Ser Val Gln Ser Ser Glu Arg Pro Leu 35 40 45

Phe Leu Val His Pro Ile Glu Gly Ser Thr Thr Val Phe His Ser Leu 50 55 60

Ala Ser Arg Leu Ser Ile Pro Thr Tyr Gly Leu Gln Cys Thr Arg Ala 65 70 75 80

Ala Pro Leu Asp Ser Ile His Ser Leu Ala Ala Tyr Tyr Ile Asp Cys 85 90 95

Ile Arg Gln Val Gln Pro Glu Gly Pro Tyr Arg Val Ala Gly Tyr Ser 100 105 110

Tyr Gly Ala Cys Val Ala Phe Glu Met Cys Ser Gln Leu Gln Ala Gln 115 120 125

Gln Ser Pro Ala Pro Thr His Asn Ser Leu Phe Leu Phe Asp Gly Ser 130 135 140

Pro Thr Tyr Val Leu Ala Tyr Thr Gln Ser Tyr Arg Ala Lys Leu Thr 145 150 155 160

Pro Gly Cys Glu Ala Glu Ala Glu Thr Glu Ala Ile Cys Phe Phe Val 165 170 175

Gln Gln Phe Thr Asp Met Glu His Asn Arg Val Leu Glu Ala Leu Leu 180 185 190

Pro Leu Lys Gly Leu Glu Glu Arg Val Ala Ala Ala Val Asp Leu Ile 195 200 205

1358

Ile Lys Ser His Gln Gly Leu Asp Arg Gln Glu Leu Ser Phe Ala Ala

210 . 215 220 Arg Ser Phe Tyr Tyr Lys Leu Arg Ala Ala Glu Gln Tyr Thr Pro Lys 225 230 235 Ala Lys Tyr His Gly Asn Val Met Leu Leu Arg Ala Lys Thr Gly Gly 250 Ala Tyr Gly Glu Asp Leu Gly Ala Asp Tyr Asn Leu Ser Gln Val Cys 260 265 270 Asp Gly Lys Val Ser Val His Val Ile Glu Gly Asp His Arg Thr Leu 280 Leu Glu Gly Ser Gly Leu Glu Ser Ile Ile Ser Ile Ile His Ser Ser 295 Leu Ala Glu Pro Arg Val Ser Val Arg Glu Gly 305 310 <210> 1317 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1317

Thr Thr Xaa Val Xaa Asp Arg Leu Leu Xaa Thr Ser Gly Ser Pro Gly
1 5 10 15

Thr Asp Arg Xaa Phe Gly His Glu Xaa Glu Met Ala Pro Asn Ala Ser 20 25 30

Cys Leu Cys Val His Val Arg Ser Glu Glu Trp Asp Leu Met Thr Phe 35 40 45

Asp Ala Asn Pro Tyr Asp Ser Val Lys Lys Ile Lys Glu His Val Arg 50 55 60

Ser Lys Thr Lys Val Pro Val Gln Asp Gln Val Leu Leu Gly Ser 65 70 75 80

Lys Ile Leu Lys Pro Arg Arg Ser Leu Ser Ser Tyr Gly Ile Asp Lys
85 90 95

Glu Lys Thr Ile His Leu Thr Leu Lys Val Val Lys Pro Ser Asp Glu
100 105 110

Glu Leu Pro Leu Phe Leu Val Glu Ser Gly Asp Glu Ala Lys Arg His 115 120 125

Leu Leu Gln Val Arg Arg Ser Ser Val Ala Gln Val Lys Ala Met 130 135 140

Ile Glu Thr Lys Thr Gly Ile Ile Pro Glu Thr Gln Ile Val Thr Cys 145 150 155 160

Asn Gly Lys Arg Leu Glu Asp Gly Lys Met Met Ala Asp Tyr Gly Ile 165 170 175

Arg Lys Gly Asn Leu Leu Phe Leu Ala Xaa Tyr Cys Ile Gly Gly
180 185 190

<210> 1318

<211> 230

<212> PRT

<213> Homo sapiens

20 25 30

Ala Ala Gly Val Glu Phe Glu Glu Lys Phe Ile Lys Ser Ala Glu Asp 35 40 45

Leu Asp Lys Leu Arg Asn Asp Gly Tyr Leu Met Phe Gln Gln Val Pro 50 55 60

Met Val Glu Ile Asp Gly Met Lys Leu Val Gln Thr Arg Ala Ile Leu 65 70 75 80

Asn Tyr Ile Ala Ser Lys Tyr Asn Leu Tyr Gly Lys Asp Ile Lys Glu 85 90 95

Arg Ala Leu Ile Asp Met Tyr Ile Glu Gly Ile Ala Asp Leu Gly Glu
100 . 105 110

Met Ile Leu Leu Pro Val Cys Pro Pro Glu Glu Lys Asp Ala Lys 115 120 125

Leu Ala Leu Ile Lys Glu Lys Ile Lys Asn Arg Tyr Phe Pro Ala Phe 130 135 140

Glu Lys Val Leu Lys Ser His Gly Gln Asp Tyr Leu Val Gly Asn Lys 145 150 155 160

Leu Ser Arg Ala Asp Ile His Leu Val Glu Leu Leu Tyr Tyr Val Glu 165 170 175

Glu Leu Asp Ser Ser Leu Ile Ser Ser Phe Pro Leu Leu Lys Ala Leu 180 185 190

Lys Thr Arg Ile Ser Asn Leu Pro Thr Val Lys Lys Phe Leu Gln Pro 195 200 205

Gly Ser Pro Arg Lys Pro Pro Met Asp Glu Lys Ser Leu Glu Glu Ala 210 215 220

Arg Lys Ile Phe Arg Phe 225 230

<210> 1319 <211> 279

<212> PRT <213> Homo sapiens <400> 1319 Glu Gly Pro Ala Glu Gly Asn Met Ala Ala Lys Val Phe Glu Ser Ile Gly Lys Phe Gly Leu Ala Leu Ala Val Ala Gly Gly Val Val Asn Ser Ala Leu Tyr Asn Val Asp Ala Gly His Arg Ala Val Ile Phe Asp Arg 35 40 Phe Arg Gly Val Gln Asp Ile Val Val Gly Glu Gly Thr His Phe Leu Ile Pro Trp Val Gln Lys Pro Ile Ile Phe Asp Cys Arg Ser Arg Pro 75 ... 70 . Arg Asn Val Pro Val Ile Thr Gly Ser Lys Asp Leu Gln Asn Val Asn 90 Ile Thr Leu Arg Ile Leu Phe Arg Pro Val Ala Ser Gln Leu Pro Arg Ile Phe Thr Ser Ile Gly Glu Asp Tyr Asp Glu Arg Val Leu Pro Ser 120 125 Ile Thr Thr Glu Ile Leu Lys Ser Val Val Ala Arg Phe Asp Ala Gly 130 135 Glu Leu Ile Thr Gln Arg Glu Leu Val Ser Arg Gln Val Ser Asp Asp 155 150 Leu Thr Glu Arg Ala Ala Thr Phe Gly Leu Ile Leu Asp Asp Val Ser 170 Leu Thr His Leu Thr Phe Gly Lys Glu Phe Thr Glu Ala Val Glu Ala 180 Lys Gln Val Ala Gln Glu Ala Glu Arg Ala Arg Phe Val Val Glu 195 Lys Ala Glu Gln Gln Lys Lys Ala Ala Ile Ile Ser Ala Glu Gly Asp 215 Ser Lys Ala Ala Glu Leu Ile Ala Asn Ser Leu Ala Thr Ala Gly Asp 225 230 235

Gly Leu Ile Glu Leu Arg Lys Leu Glu Ala Ala Glu Asp Ile Ala Tyr

250

245

Gln Leu Ser Arg Ser Arg Asn Ile Thr Tyr Leu Pro Ala Gly Gln Ser 260 265 270

Val Leu Leu Gln Leu Pro Gln 275

<210> 1320

WO 00/55350

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1320

Val Thr Ala Cys Ala Ala Pro Ala Ala Trp Leu Pro Ile Leu Val Ala 1 5 10 15

Asp Ile Trp Ser Ser Tyr Asn Het Ala Asp Ile Asp Asn Lys Glu Gln
20 25 30

Ser Glu Leu Asp Gln Asp Leu Asp Asp Val Glu Glu Val Glu Glu Glu Glu 35 40 45

Glu Thr Gly Glu Glu Thr Lys Leu Lys Ala Arg Gln Leu Thr Val Gln
50 55 60

Met Met Gln Asn Pro Gln Ile Leu Ala Ala Leu Gln Glu Arg Leu Asp
65 70 75 80

Gly Leu Val Glu Thr Pro Thr Gly Tyr Ile Glu Ser Leu Pro Arg Val 85 90 95

Val Lys Arg Arg Val Asn Ala Leu Lys Asn Leu Gln Val Lys Cys Ala 100 105 110

Gln Ile Glu Ala Lys Phe Tyr Glu Glu Val His Asp Leu Glu Arg Lys 115 120 125

Tyr Ala Val Leu Tyr Gln Pro Leu Phe Asp Lys Arg Phe Glu Ile Ile 130 135 140

Asn Ala Ile Tyr Glu Pro Thr Glu Glu Glu Cys Glu Trp Lys Pro Asp 145 150 155 160

Glu Glu Asp Glu Ile Ser Glu Glu Leu Lys Glu Lys Ala Lys Ile Glu
165 170 175

Asp Glu Lys Lys Asp Glu Glu Lys Glu Asp Pro Lys Gly Ile Pro Glu 180 185 190

Phe Trp Leu Thr Val Phe Lys Asn Val Asp Leu Leu Ser Asp Met Val 195 200 205

Gln Glu His Asp Glu Pro Ile Leu Lys His Leu Lys Asp Ile Lys Val 210 215 220

Lys Phe Ser Asp Ala Gly Gln Pro Met Ser Phe Val Leu Glu Phe His 225 230 235 240

Phe Glu Pro Asn Glu Tyr Phe Thr Asn Glu Val Leu Thr Lys Thr Tyr
245 250 255

Arg Met Arg Ser Glu Pro Asp Asp Ser Asp Pro Phe Ser Phe Asp Gly
260 265 270

Pro Glu Ile Met Gly Cys Thr Gly Cys Gln Ile Asp Trp Lys Lys Gly 275 280 285

Lys Asn Val Thr Leu Lys Thr Ile Lys Lys Lys Gln Lys His Lys Gly
290 295 300

Arg Gly Thr Val Arg Thr Val Thr Lys Thr Val Ser Asn Asp Ser Phe 305 310 315 320

Phe Asn Phe Phe Ala Pro Pro Glu Val Pro Glu Ser Gly Asp Leu Asp 325 330 335

Asp Asp Ala Glu Ala Ile Leu Ala Ala Asp Phe Glu Ile Gly His Phe 340 345 350

Leu Arg Glu Arg Ile Ile Pro Arg Ser Val Leu Tyr Phe Thr Gly Glu 355 360 365

Ala Ile Glu Asp Asp Asp Asp Tyr Asp Glu Glu Glu Glu Ala 370 375 380

Asp Glu Gly Tyr Gln Leu Phe Glu Glu Val Lys Ser Cys Ser Lys Leu 385 390 395 400

Phe Gln Arg Trp Leu Gln 405

<210> 1321

<211> 173

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

1364

<222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1321 Gln Ser Ala Cys Ser Leu Leu Pro Glu Met Pro Arg Ile Leu Thr Arg 10 Thr Pro Ser Ser Arg Met Ile Val Leu Arg Leu Met Pro Val Gly Gly 25 Arg Arg Pro Ile Val Thr Ser Phe Gly Gly Cys Ser Thr Ala Pro Arg Ala Asn Phe Pro Leu Pro Xaa Pro Ala Leu Arg Gln Ser Arg Ser Lys 55 Tou Let Met Ala Val Val Gly Val Ser Ser Val Ser Arg Leu Leu Gly Arg Ser 75 Arg Pro Gln Leu Gly Arg Pro Met Ser Ser Gly Ala His Gly Glu Glu 85 Gly Ser Ala Arg Met Trp Lys Thr Leu Thr Phe Phe Val Ala Leu Pro 100 105 Gly Val Ala Val Ser Met Leu Asn Val Tyr Leu Lys Ser His His Gly 120 Glu His Glu Arg Pro Glu Phe Ile Ala Tyr Pro His Leu Arg Ile Arg 130 135 Thr Lys Pro Phe Pro Trp Gly Asp Gly Asn His Thr Leu Phe His Asn 150 Pro His Val Asn Pro Leu Pro Thr Gly Tyr Glu Asp Glu 165 170

<210> 1322

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1322

Lys Thr Gln Ala Ala Ser Val Glu Ala Val Lys Met Leu Asp Glu Ile 1 5 10 15

Leu Leu Gln Leu Ser Ala Ser Val Pro Val Asp Val Met Pro Gly Glu
20 25 30

1365

Phe Asp Pro Thr Asn Tyr Thr Leu Pro Gln Gln Pro Leu His Pro Cys
35 40 45

Met Phe Pro Leu Ala Thr Ala Tyr Ser Thr Leu Gln Leu Val Thr Asn 50 55 60

Pro Tyr Gln Ala Thr Ile Asp Gly Val Arg Phe Leu Gly Thr Ser Gly 65 70 75 80

Gln Asn Val Ser Asp Ile Phe Arg Tyr Ser Ser Met Glu Asp His Leu 85 90 95

Glu Ile Leu Glu Trp Thr Leu Arg Val Arg His Ile Ser Pro Thr Ala 100 105 110

Pro Asp Thr Leu Gly Cys Tyr Pro Phe Tyr Lys Thr Asp Pro Phe Ile 115 120 125

Phe Pro Glu Cys Pro His Val Tyr Phe Cys Gly Asn Thr Pro Ser Phe 130 135 140

Gly Ser Lys Ile Ile Arg Gly Pro Glu Asp Gln Thr Val Leu Leu Val 145 150 155 160

Thr Val Pro Asp Phe Ser Ala Thr Gln Thr Ala Cys Leu Val Asn Leu 165 170 175

Arg Ser Leu Ala Cys Gln Pro Ile Ser Phe Ser Gly Phe Gly Ala Glu 180 185 190

Asp Asp Leu Gly Gly Leu Gly Trp Ala Pro Asp Ser Lys Lys Trp 195 200 205

Phe

<210> 1323

<211> 291

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1														
Asn 1	Asn	Val	Ala	Thr 5	Thr	His	Glu	Pro	Ala 10	Ser	Val	Pro	Ala	Pro 15	Gl
Gly	Asp	Leu	Leu 20	Ser	Gly	Ala	Glu	Pro 25	Glu	Gly	Gly	Asn	Xaa 30	Ala	Arg
Arg	Pro	Pro 35	Gly	Ala	Arg	Glu	Gln 40	Pro	Gln	Ser	Pro	Pro 45	Pro	Ala	Arg
Gly	Gly 50	Ala	Gly	Ser	Leu	Ala 55	Thr	Xaa	Ala	Pro	Pro 60	Ser	Ser	Gly	Leu
Ser 65	Cys	Pro	Gly	Cys	Phe 70	Arg	Leu	Arg	Leu	Trp 75	Met	Leu	Arg	Leu	Ser 80
Glu	Arg	Asn	Met	Lys 85	Val <sup>*</sup>	Leu	Leu	Ala	Ala 90	Ala	Leu	Ile	Ala	Gly 95	Ser
Val	Phe	Phe	Leu 100	Leu	Leu	Pro	Gly	Pro 105	Ser	Ala	Ala	Asp	Glu 110	Lys	Lys
Lys	Gly	Pro 115	Lys	Val	Thr	Val	Lys 120	Val	Tyr	Phe	Asp	Leu 125	Arg	Ile	Gly
Asp	Glu 130	Asp	Val	Gly	Arg	Val 135	Ile	Phe	Gly	Leu	Phe 140	Gly	Lys	Thr	Va]
Pro 145	Lys	Thr	Val	Asp	Asn 150	Phe	Val	Ala	Leu	Ala 155	Thr	Gly	Glu	Lys	Gly 160
Phe	Gly	Tyr	Lys	Asn 165	Ser	Lys	Phe	His	Arg 170	Val	Ile	Lys	Asp	Phe 175	Met
Ile	Gln	Gly	Gly 180	Asp	Phe	Thr	Arg	Gly 185	Asp	Gly	Thr	Gly	Gly 190	Lys	Ser
Ile	Tyr	Gly 195	Glu	Arg	Phe	Pro	Asp 200	Glu	Asn	Phe	Lys	Leu 205	Lys	His	Туг
Gly	Pro 210	Gly	Trp	Val	Ser	Met 215	Ala	Asn	Ala	Gly	Lys 220	Asp	Thr	Asn	Gly
Ser 225	Gln	Phe	Phe	Ile	Thr 230	Thr	Val	Lys	Thr	Ala 235	Trp	Leu	Asp	Gly	Lys 240
His	Val	Val	Phe	Gly	Lys	Val	Leu	Glu	Gly	Met	Glu	Val	Val	Arg	Lys

Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys Pro Leu Lys Asp Val 260 265 270

Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu Lys Pro Phe Ala Ile 275 280 285

Ala Lys Glu 290

WO 00/55350

<210> 1324

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1324

Glu Cys Leu Val Arg Ser Lys Asn Ile Thr Gln Ile Val Gly His Ser 1 5 10 15

Gly Cys Glu Ala Lys Ser Ile Gln Asn Arg Ala Cys Leu Gly Gln Cys
20 25 30

Phe Ser Tyr Ser Val Pro Asn Thr Phe Pro Gln Ser Thr Glu Ser Leu 35 40 45

Val His Cys Asp Ser Cys Met Pro Ala Gln Ser Met Trp Glu Ile Val 50 55 60

Thr Leu Glu Cys Pro Gly His Glu Glu Val Pro Arg Val Asp Lys Leu 65 70 75 80

Val Glu Lys Ile Leu His Cys Ser Cys Gln Ala Cys Gly Lys Glu Pro 85 90 95

Ser His Glu Gly Leu Ser Val Tyr Val Gln Gly Glu Asp Gly Pro Gly
100 105 110

Ser Gln Pro Gly Thr His Pro His Pro His Pro His Pro Gly 115 120 125

Gly Gln Thr Pro Glu Pro Glu Asp Pro Pro Gly Ala Pro His Thr Glu 130 135 140

Glu Glu Gly Ala Glu Asp 145 150

<210> 1325

<211> 56

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<212> PRT
 <213> Homo sapiens
 <400> 1325
 Glu Ile Asn Ile Ser Arg Lys Gly Glu Ser Arg Phe Tyr Lys Met Ser
 Gln Leu Ser Asn Ile Trp Gly Ser Asp Ser Phe Phe Val Arg Thr Phe
                                  25
 Glu Thr Ser Lys Gln Pro Leu Phe Leu Lys Asn Ser Gly Phe Thr Leu
          35
                              40
                                                  45
 Thr His Val Ser Phe Thr Pro Phe
  50
 <210> 1326
 <211> 486
 <212> PRT
 <213> Homo sapiens
<220>
 <221> SITE
 <222> (34)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (438)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (447)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1326
 Arg Leu Pro Leu Gly Ser Arg Ser Pro Ser Glu Ala Ala Gly Ala Glu
 Thr Ala Pro Ser Ser Leu Ser Ala Ala Met Thr Pro Leu Val Ser Arg
              20
                                  25
 Leu Xaa Arg Leu Trp Ala Ile Met Arg Lys Pro Arg Ala Ala Val Gly
                              40
 Ser Gly His Arg Lys Gln Ala Ala Ser Gln Glu Gly Arg Gln Lys His
      50
                                              60
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WO 00/55350

Ala 65	-	Asn	Asn	Ser	Gln 70	Ala	Lys	Pro	Ser	75	_	Asp	Gly	Leu	Ala 80
Arg	Gln	Pro	Glu	Glu 85	Val	Val	Leu	Gln	Ala 90		Val	Ser	Ser	Tyr 95	His
Leu	Phe	Arg	Asp 100	Val	Ala	Glu	Val	Thr 105	Ala	Phe	Arg	Gly	Ser 110		Leu
Ser	Trp	Туг 115	Asp	Gln	Glu	Lys	Arg 120	Asp	Leu	Pro	Trp	Arg 125		Arg	Ala
Glu	Asp 130	Glu	Met	Asp	Leu	Asp 135	-	Arg	Ala	Tyr	Ala 140	Val	Trp	Val	Ser
Glu 145	Val	Met	Leu	Gln	Gln 150	Thr	Gln	Val	Ala	Thr 155		Ile	Asn	Tyr	Туг 160
Thr	Gly	Trp	Met	Gln 165	Lys	Trp	Pro	Thr	Leu 170	Gln	Asp	Leu	Ala	Ser 175	Ala
Ser	Leu	Glu	Glu 180	Val	Asn	Gln	Leu	Trp 185	Ala	Gly	Leu	Gly	Туг 190	Tyr	Ser
		195	-		Gln		200					205			
Gly	Gly 210	His	Met	Pro	Arg	Thr 215	Ala	Glu	Thr	Leu	Gln 220	Gln	Leu	Leu	Pro
Gly 225	Val	Gly	Arg	Tyr	Thr 230	Ala	Gly	Ala	Ile	Ala 235	Ser	Ile	Ala	Phe	Gly 240
Gln	Ala	Thr	Gly	Val 245	Val	Asp	Gly	Asn	Val 250	Ala	Arg	Val	Leu	Cys 255	Arg
Val	Arg	Ala	11e 260	Gly	Ala	Asp	Pro	Ser 265	Ser	Thr	Leu	Val	Ser 270	Gln	Gln
Leu	Trp	Gly 275	Leu	Ala	Gln		<b>Leu</b> 280	Val	Asp	Pro	Ala	Arg 285	Pro	Gly	Asp
	290				Met	295					300				
305					Gln 310					315					320
Gln	Arg	Val	Glu	Gln 325	Glu	Gln	Leu	Leu	A1a 330	Ser	Gly	Ser	Leu	Ser 335	Gly

1370

Ser Pro Asp Val Glu Glu Cys Ala Pro Asn Thr Gly Gln Cys His Leu 340 345 350

Cys Leu Pro Pro Ser Glu Pro Trp Asp Gln Thr Leu Gly Val Val Asn 355 360 365

Phe Pro Arg Lys Ala Ser Arg Lys Pro Pro Arg Glu Glu Ser Ser Ala 370 375 380

Thr Cys Val Leu Glu Gln Pro Gly Ala Leu Gly Ala Gln Ile Leu Leu 385 390 395 400

Val Gln Arg Pro Asn Ser Gly Leu Leu Ala Gly Leu Trp Glu Phe Pro 405 410 415

Ser Val Thr Trp Glu Pro Ser Glu Gln Leu Gln Arg Lys Ala Leu Leu 420 425 430

Gln Glu Leu Gln Arg Xaa Ala Gly Pro Leu Pro Ala Thr His Xaa Arg 435 440 445

His Leu Gly Glu Val Val His Thr Phe Ser His Ile Lys Leu Thr Tyr 450 455 460

Gln Val Tyr Gly Leu Ala Leu Glu Gly Gln Thr Pro Val Thr Thr Val 465 470 475 480

Pro Pro Gly Ala Arg Cys 485

<210> 1327

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1327

Lys Thr Leu Phe Thr Tyr Ser Phe His.Gly Tyr Asn Thr Leu Ala Asp 1 5 10 15

Phe Leu Leu Ala Leu Gly Ala Met Ile Leu Ile Thr Phe Cys Lys Val 20 25 30

Thr Asn Val Ile His Ser Thr Leu Cys Gly Ser His Leu Phe Arg Leu
35 40 45

Met Cys Phe Gly Glu Arg Lys Lys Phe Leu Ala Glu Tyr Tyr Phe Glu 50 55 60

Leu Ser Arg Thr Leu Ser His Gln Arg Gln Phe Phe Ser Val Gln Phe

1371

65 70 75 80

Pro Ile Pro Asp Asn Leu Leu Lys 85

<210> 1328

<211> 424

<212> PRT

<213> Homo sapiens

<400> 1328

Ile Arg Val Ser Phe Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu 1 5 10 15

Ser Gly Gln Arg Phe Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe 20 25 30

Asp Pro Thr Gln Phe Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr 35 40 45

Gly Thr Asp Leu Glu Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala 50 55 60

Lys Leu Asp Tyr Arg Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val 65 70 75 80

Ala Gly Gly Met Leu Ala Pro Gly Gly Thr Leu Ala Asp Asp Met Met 85 90 95

Arg Thr Asp Val Cys Val Phe Ala Ala Gln Glu Asp Leu Glu Thr Met 100 105 110

Gln Ala Phe Ala Gln Val Phe Asn Lys Leu Ile Arg Arg Tyr Lys Tyr 115 120 125

Leu Glu Lys Gly Phe Glu Asp Glu Val Lys Lys Leu Leu Phe Leu 130 135 140

Lys Gly Phe Ser Glu Ser Glu Arg Asn Lys Leu Ala Met Leu Thr Gly 145 150 155 160

Val Leu Leu Ala Asn Gly Thr Leu Asn Ala Ser Ile Leu Asn Ser Leu 165 170 175

Tyr Asn Glu Asn Leu Val Lys Glu Gly Val Ser Ala Ala Phe Ala Val 180 185 190

Lys Leu Phe Lys Ser Trp Ile Asn Glu Lys Asp Ile Asn Ala Val Ala 195 200 205

 Pro
 Ala Asn
 Lys
 Gln
 Ser 230
 Val
 Glu
 His
 Phe Thr Lys
 Tyr
 Phe Thr Glu 240

 Ala Gly
 Leu
 Lys
 Glu
 Leu
 Ser Glu
 Tyr
 Val
 Arg Asn
 Gln
 Gln
 Thr Ile 255

 Gly
 Ala Arg
 Lys
 Glu
 Leu
 Gln
 Lys
 Glu
 Leu
 Gln
 Lys
 Gln
 Met
 Ser Arg 270

 Gly
 Asp
 Pro
 Pro
 Lys
 Asp
 Ile
 Leu
 Tyr
 Val
 Lys
 Glu
 Glu
 Met
 Lys

 Lys
 Asn
 Asn
 Asn
 Ile
 Pro
 Glu
 Pro
 Val
 Val
 Val
 Ile
 Gly
 Ile
 Gly
 Ile
 Val
 Trp
 Ser

 Lys
 Asn
 Asn
 Asn
 Ile
 Pro
 Gly
 Val
 Val
 Ile
 Gly
 Ile
 Val
 Trp
 Ser

 Val
 Met
 Ser
 Thr
 Val
 Ile
 Thr
 Val
 Val
 Ile
 Val
 <t

Ala Ser Leu Arg Lys Val Ser Met Asp Asn Arg Leu Met Glu Leu Phe

305 310 315 320

Gln Ala Ile Lys His Leu Lys Gln Tyr Ser Pro Leu Leu Ala Ala Phe 325 330 335

Thr Thr Gln Gly Gln Ser Glu Leu Thr Leu Leu Leu Lys Ile Gln Glu 340 345 350

Tyr Cys Tyr Asp Asn Ile His Phe Met Lys Ala Phe Gln Lys Ile Val

Val Leu Phe Tyr Lys Ala Glu Val Leu Ser Glu Glu Pro Ile Leu Lys 370 375 380

Trp Tyr Lys Asp Ala His Val Ala Lys Gly Lys Ser Val Phe Leu Glu 385 390 395 400

Gln Met Lys Lys Phe Val Glu Trp Leu Lys Asn Ala Glu Glu Glu Ser 405 410 415

Glu Ser Glu Ala Glu Glu Gly Asp 420

<210> 1329

<211> 558

<212> PRT

<213> Homo sapiens

<400> 1329

Trp Tyr Cys Ser Val Gly Leu Ala Ser Thr Ala Gly Glu Gln Ala Ala Ala Val Ala Ala Ala Phe Ser Leu His Pro Asp Tyr Ala Met Leu Gly Phe Val Gly Arg Val Ala Ala Ala Pro Ala Ser Gly Ala Leu Arg Arg Leu Thr Pro Ser Ala Ser Leu Pro Pro Ala Gln Leu Leu Leu Arg Ala 55 Ala Pro Thr Ala Val His Pro Val Arg Asp Tyr Ala Ala Gln Thr Ser 75 65 70 Pro Ser Pro Lys Ala Gly Ala Ala Thr Gly Arg Ile Val Ala Val Ile Gly Ala Val Val Asp Val Gln Phe Asp Glu Gly Leu Pro Pro Ile Leu 105 Asn Ala Leu Glu Val Gln Gly Arg Glu Thr Arg Leu Val Leu Glu Val 115 120 Ala Gln His Leu Gly Glu Ser Thr Val Arg Thr Ile Ala Met Asp Gly 130 135 Thr Glu Gly Leu Val Arg Gly Gln Lys Val Leu Asp Ser Gly Ala Pro 150 155 Ile Lys Ile Pro Val Gly Pro Glu Thr Leu Gly Arg Ile Met Asn Val 170 Ile Gly Glu Pro Ile Asp Glu Arg Gly Pro Ile Lys Thr Lys Gln Phe 185 Ala Pro Ile His Ala Glu Ala Pro Glu Phe Met Glu Met Ser Val Glu 200 Gln Glu Ile Leu Val Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro 210 215 Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly 235 225 230 Lys Thr Val Leu Ile Met Glu Leu Ile Asn Asn Val Ala Lys Ala His 250 Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly

Asn	Asp	Leu 275	Tyr	His	Glu	Met	11e 280	Glu	Ser	Gly	Val	11e 285	Asn	Leu	Ly
Asp	Ala 290	Thr	Ser	Lys	Val	Ala 295	Leu	Val	Tyr	Gly	Gln 300	Met	Asn	Glu	Pro
Pro 305	Gly	Ala	Arg	Ala	Arg 310	Val	Ala	Leu	Thr	Gly 315	Leu	Thr	Val	Ala	Gl:
Tyr	Phe	Arg	Asp	Gln 325	Glu	Gly	Gln	Asp	Val 330	Leu	Leu	Phe	Ile	Asp 335	Ası
Ile	Phe	Arg	Phe 340	Thr	Gln	Ala	Gly	ser 345	Glu	Val	Ser	Ala	Leu 350	Leu	Gl
Arg	Ile	Pro 355	Ser	Ala	Val	Gly	Tyr 360	Gln	Pro	Thr	Leu	Ala 365	Thr	Asp	Me
Gly	Thr 370	Met	Gln	Glu	Arg	Ile 375	Thr	Thr	Thr	Lys	Lys	Gly	Ser	Ile	Thi
Ser 385	Val	Gln	Ala	Ile	Tyr 390	Val	Pro	Ala	Asp	Asp 395	Leu	Thr	Asp	Pro	A18
Pro	Ala	Thr	Thr	Phe 405	Ala	His	Leu	Asp	Ala 410	Thr	Thr	Val	Leu	Ser 415	Arg
Ala	Ile	Ala	Glu 420	Leu	Gly	Ile	Tyr	Pro 425	Ala	Val	Asp	Pro	Leu 430	Asp	Sei
Thr	Ser	Arg 435	Ile	Met	Asp	Pro	Asn 440	Ile	Val	Gly	Ser	Glu 445	His	Tyr	Asp
Val	Ala 450	Arg	Gly	Val	Gln	Lys 455	Ile	Leu	Gln	Asp	Tyr 460	Lys	Ser	Leu	Glr
465					470			_	Glu	475				_	480
				485					Gln 490					495	
			500				•	505	His				510		
		515					520		Gln			525			
qeA	His 530	Leu	Pro	Glu	Gln	Ala 535	Phe	Tyr	Met	Val	Gly 540	Pro	Ile	Glu	Glu

Ala Val Ala Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser 545 550 555

<210> 1330

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1330

Thr Thr Pro Leu Ser Gln Ile Val Ala Arg Gly Leu Ile Ala Arg Gly
1 5 10 15

Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln Arg Ala 20 25 30

Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu Asp Met
35 40 45

Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile Arg Val 50 55 60

Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln Ala Thr. 65 70 75 80

Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile Pro Leu 85 90 95

Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu Phe Leu
100 105 110

Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro Val Glu 115 120 125

Gly Gly Phe Trp Ala Cys
130

<210> 1331

<211> 188

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1331

Ile Arg His Glu Pro Ser Arg Cys Arg Ser Arg Thr Ala Ala Val Cys
1 5 10 15

Ser Pro Pro Pro Cys Pro Pro Trp Arg Arg Pro Arg Gly Pro Trp Thr
20 25 30

Ala Lys: Ser Pro: Pro: Trp Pro: Pro Ala Arg Pro Arg Trp Gln Trp Thr 35. 40. 45

Arg Ala Leu Asn Ser Thr Alai Ala Pro Pro Arg Ser Pro Pro Ala Pro
50 55 60

Cys Pro Cys Arg Pro Asn Ser Ala Arg Arg Lys Arg Arg Pro Pro Ala 65 70 75 80

Asn Cys Arg Ala Ser Ser Gly Trp Leu Ala Ala Trp Lys Pro Ser Arg 85 90 95

Thr Gly Pro Ala Ala Arg Pro Arg Pro Val Pro Asp Thr Ser Phe

His Ser Ser Pro Val: Gln Ala Ala Val His Phe Val Gly Tyr Lys Ile 115 120 125

Asn His Gly Pro Ala Met Xaa Leu Xaa Phe Leu Leu Gln Leu Arg Leu 130 135 140

Gly Arg Gly Pro Gly Leu Pro Arg Glu Asn Val Leu Glu Thr Ala Pro 145 150 155 160

Val Phe Leu Ala Trp Phe Ile Cys Pro Gly Ser Gly Ser Asp Ser Gly
165 170 175

Gly Ser Glu Thr Ser Val Ala Leu Ser Tyr Trp Gly 180 185

<210> 1332

<211> 237

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

WO 00/55350

<223> Xaa equals any of the maturally occurring L-amino acids <400> 1332 Asp Asp Arg Arg Xaa Asp Ala Glu Ala Asp Lys Met Ala Ala Ala Ala 10 Val Gln Gly Gly Arg Ser Gly Gly Ser Gly Gly Cys Ser Gly Ala Gly 20 Gly Ala Ser Asn Cys Gly Thr Gly Ser Gly Arg Ser Gly Leu Leu Asp Lys Trp Lys Ile Asp Asp Lys Pro Val Lys Ile Asp Lys Trp Asp Gly 55 Ser Ala Val Lys Asn Ser Leu Asp Asp Ser Ala Lys Lys Val Leu Leu 70 75 Glu Lys Tyr Lys Tyr Val Glu Asn Phe Gly Leu Ile Asp Gly Arg Leu 90 85 Thr Ile Cys Thr Ile Ser Cys Phe Phe Ala Ile Val Ala Leu Ile Trp 100 110 105 Asp Tyr Met His Pro Phe Pro Glu Ser Lys Pro Val Leu Ala Leu Cys 120 Val Ile Ser Tyr Phe Val Met Met Gly Ile Leu Thr Ile Tyr Thr Ser 135 Tyr Lys Glu Lys Ser Ile Phe Leu Val Ala His Arg Lys Asp Pro Thr 145 150 155 Gly Met Asp Pro Asp Asp Ile Trp Gln Leu Ser Ser Ser Leu Lys Arg 170 Phe Asp Asp Lys Tyr Thr Leu Lys Leu Thr Phe Ile Ser Gly Arg Thr 185

Lys Gln Gln Arg Glu Ala Glu Phe Thr Lys Ser Ile Ala Lys Phe Phe

Asp His Ser Gly Thr Leu Val Met Asp Ala Tyr Glu Pro Glu Ile Ser

Arg Leu His Asp Ser Leu Ala Ile Glu Arg Lys Ile Lys
225 230 235

<211> 56 <212> PRT <213> Homo sapiens <400> 1333 Thr Thr Ala Asn Pro Leu Lys Thr Arg Gly Leu Ala Leu Val Ala Gln

10

Pro Lys Val Ala Leu Gln Ile Phe Glu Arg Ala Thr Ala Thr Phe Leu 20

Pro Ser Gln Leu Ser Leu Asp Phe Ser Glu Ser Gly Tyr Cys Tyr Pro 40

Asn Val Cys Leu Tyr Glu Cys Ile

<210> 1334 <211> 207 <212> PRT <213> Homo sapiens

<400> 1334

Ser His Pro Ala Cys Ala Lys Val Glu Tyr Ala Tyr Ser Asp Asn Ser 

Leu Asp Pro Asp Asp Glu Asp Ser Asp Tyr His Gln Glu Ala Tyr Lys 20 25

Glu Ser Tyr Lys Asp Arg Arg Arg Ala His Thr Gln Ala Glu Gln 40

Lys Arg Arg Asp Ala Ile Lys Arg Gly Tyr Asp Asp Leu Gln Thr Ile

Val Pro Thr Cys Gln Gln Gln Asp Phe Ser Ile Gly Ser Gln Lys Leu 65

Ser Lys Ala Ile Val Leu Gln Lys Thr Ile Asp Tyr Ile Gln Phe Leu

His Lys Glu Lys Lys Gln Glu Glu Val Ser Thr Leu Arg Lys 105

Asp Val Thr Ala Leu Lys Ile Met Lys Val Asn Tyr Glu Gln Ile Val 115 120

Lys Ala His Gln Asp Asn Pro His Glu Gly Glu Asp Gln Val Ser Asp 135 140

Gln Val Lys Phe Asn Val Phe Gln Gly Ile Met Asp Ser Leu Phe Gln 145 150 155 Ser Phe Asn Ala Ser Ile Ser Val Ala Ser Phe Gln Glu Leu Ser Ala 170 Cys Val Phe Ser Trp Ile Glu Glu His Cys Lys Pro Gln Thr Leu Arg 185 Glu Ile Val Ile Gly Val Leu His Gln Leu Lys Asn Gln Leu Tyr 195 200 <210> 1335 <211> 1005 <212> PRT <213> Homo sapiens <400> 1335 Arg Val Leu Gln Tyr Val Val Pro Glu Val Lys Asp Leu Tyr Asn Trp 5 10 Leu Glu Val Glu Phe Asn Pro Leu Lys Leu Cys Glu Arg Val Thr Lys 20 . 25 Val Leu Asn Trp Val Arg Glu Gln Pro Glu Lys Glu Pro Glu Leu Gln 40 Gln Tyr Val Pro Gln Leu Gln Asn Asn Thr Ile Leu Arg Leu Leu Gln 50 · 55 Gln Val Ser Gln Ile Tyr Gln Ser Ile Glu Phe Ser Arg Leu Thr Ser 70 Leu Val Pro Phe Val Asp Ala Phe Gln Leu Glu Arg Ala Ile Val Asp 90 Ala Ala Arg His Cys Asp Leu Gln Val Arg Ile Asp His Thr Ser Arg 100 Thr Leu Ser Phe Gly Ser Asp Leu Asn Tyr Ala Thr Arg Glu Asp Ala Pro Ile Gly Pro His Leu Gln Ser Met Pro Ser Glu Gln Ile Arg Asn 135 Gln Leu Thr Ala Met Ser Ser Val Leu Ala Lys Ala Leu Glu Val Ile

155

145

Lys	Pro	Ala	His	11e 165	Leu	Gln	<b>G</b> lu	Lys	Glu 170	Glu	Gln	His	Gln	Leu 175	Ala
Val	Thr	Ala	Туг 180	Leu	Lys	Asn	Ser	Arg 185	Lys	Glu	His	Gln	Arg 190	Ile	Lei
Ala	Arg	Arg 195	Gln	Thr	Ile	Glu	Glu 200	Arg	Lys	Glu	Arg	Leu 205	Glu	Ser	Let
Asn	Ile 210	Gln	Arg	Glu	ГÀЗ	Glu 215	<b>G</b> lu	Leu	Glu	Gln	Arg 220	Glu	Ala	Glu	Let
Gln 225	Lys	Val	Arg	Lys	Ala 230	Glu	Glu	Glu	Arg	Leu 235	Arg	Gln	Glu	Ala	Lys 240
				245					Glu 250					255	
			260					265	Ile				270		
		275			_		280		Glu	_		285			
	290	<u>-</u> *	٠		٠. ٠	295	2 1		Glu	ā.	300	- 0			-
305					310				Gln	315		_			320
				325					11e 330			•		335	
		,	340					345	Asp				350		
		355					360		Glu			365			
	370					375			Glu		380				
385					390				Val	395					400
				405					Arg 410					415	
11g	гÀа	Arg	GIN	Arg	гÀг	GIU	GIU	Arg	Arg	тте	THE	TAL	Tyr	wig	GIU

Lys Glu Glu Glu Glu Gln Arg Arg Ala Glu Glu Gln Met Leu Lys Glu 435 440 Arg Glu Glu Arg Glu Arg Ala Glu Arg Ala Lys Arg Glu Glu Glu Leu Arg Glu Tyr Gln Glu Arg Val Lys Lys Leu Glu Glu Val Glu Arg Lys 470 475 465 Lys Arg Gln Arg Glu Leu Glu Ile Glu Glu Arg Glu Arg Arg Glu 485 490 Glu Glu Arg Arg Leu Gly Asp Ser Ser Leu Ser Arg Lys Asp Ser Arg 500 505 Trp Gly Asp Arg Asp Ser Glu Gly Thr Trp Arg Lys Gly Pro Glu Ala 515 Asp Ser Glu Trp Arg Arg Gly Pro Pro Glu Lys Glu Trp Arg Arg Gly 535 Glu Gly Arg Asp Glu Asp Arg Ser His Arg Arg Asp Glu Glu Arg Pro 555 550 Arg Arg Leu Gly Asp Asp Glu Asp Arg Glu Pro Ser Leu Arg Pro Asp 565 570 Asp Asp Arg Val Pro Arg Arg Gly Met Asp Asp Asp Arg Gly Pro Arg 585 Arg Gly Pro Glu Glu Asp Arg Phe Ser Arg Arg Gly Ala Asp Asp Asp 595 Arg Pro Ser Trp Arg Asn Thr Asp Asp Asp Arg Pro Pro Arg Arg Ile 610 615 Ala Asp Glu Asp Arg Gly Asn Trp Arg His Ala Asp Asp Asp Arg Pro 630 635 Pro Arg Arg Gly Leu Asp Glu Asp Arg Gly Ser Trp Arg Thr Ala Asp 645 650 Glu Asp Arg Gly Pro Arg Arg Gly Met Asp Asp Asp Arg Gly Pro Arg 660 Arg Gly Gly Ala Asp Asp Glu Arg Ser Ser Trp Arg Asn Ala Asp Asp Asp Arg Gly Pro Arg Arg Gly Leu Asp Asp Arg Gly Pro Arg Arg 690 695

Gly 705	Met	Asp	Asp	Asp	Arg 710	Gly	·Pro	Arg	Arg	Gly 715	Met	Asp	Asp	Asp	Arg 720
Gly	Pro	Arg	Arg	Gly 725	Met	Asp	Asp	Asp	Arg 730	Gly	Pro	Arg	Arg	Gly 735	Leu
Asp	Asp	Asp	Arg 740	Gly	Pro	Trp	Arg	Asn 745	Ala	Asp	Asp	Asp	Arg 750	Ile	Pro
Arg	Arg	Gly 755	Ala	Glu	Asp	Asp	Arg <b>7</b> 60	Gly	Pro	Trp	Arg	Asn 765	Met	Asp	Asp
Asp	Arg 770	Leu	Ser	Arg	Arg	Ala 775	Asp	Asp	Asp	Arg	Phe 780	Pro	Arg	Arg	Gly
Asp 785	Asp	Ser	Arg	Pro	Gly 790	Pro	Trp	Arg	Pro	Leu 795	Val	Lys	Pro	Gly	Gly 800
Trp	Arg	Glu	Lys	Glu 805	Lys	Ala	Arg	Glu	Glu 810	Ser	Trp	Gly	Pro	Pro 815	Arg
Glu	Ser	Arg	Pro 820	Ser	Glu	Glu	Arg	Glu 825	Trp	Asp	Arg	Glu	Lys 830	Glu	Arg
Asp	Arg	Asp 835	Asn	Gln	Asp	Arg	<b>Glu</b> <b>84</b> 0	Glu	Asn	Asp	Lys	Asp 845	Pro	Glu	Arg
Glu	Arg 850	Asp	Arg	Glu	Arg	Asp 855	Val	Asp	Arg	Glu	Asp 860	Arg	Phe	Arg	Arg
Pro 865	Arg	Asp	Glu	Gly	Gly 870	Trp	Arg	Arg	Gly	Pro 875	Ala	Glu	Glu	Ser	Ser 880
Ser	Trp	Arg	Asp	Ser 885	Ser	Arg	Arg	Asp	Asp 890	Arg	Asp	Arg	Asp	Asp 895	Arg
Arg	Arg	Glu	Arg 900	Asp	Asp	Arg	Arg	Asp 905	Leu	Arg	Glu	Arg	Arg 910	Asp	Leu
Arg	Asp	Asp 915	Arg	Asp	Arg	Arg	<b>Gl</b> y 9 <b>2</b> 0	Pro	Pro	Leu	Arg	Ser 925	Glu	Arg	Glu
Glu	Val 930	Ser	Ser	Trp	Arg	Arg 935	Ala	Asp	Asp	Arg	Lys 940	Asp	Asp	Arg	Val
Glu 945	Glu	Arg	Asp	Pro	Pro 950	Arg	Arg	Val	Pro	Pro 955	Pro	Ala	Leu	Ser	Arg 960
Asp	Arg	Glu	Arg	Asp 965	Arg	Asp	Arg	Glu	Arg 970	Glu	Gly	Glu	Lys	Glu 975	Lys

1383

Ala Ser Trp Arg Ala Glu Lys Asp Arg Glu Ser Leu Arg Arg Thr Lys

985 Asn Glu Thr Asp Glu Asp Gly Trp Thr Thr Val Arg Arg 995 1000 1005 <210> 1336 <211> 231 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (64) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids. <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (83) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1336 Ala Gly Ile His Pro Met Asn Ser Ile Ser Ser Leu Asp Arg Thr Arg 10

Met Met Thr Pro Phe Met Gly Ile Ser Pro Leu Pro Gly Gly Glu Arg
20 25 30

Phe Pro Tyr Pro Ser Phe His Trp Asp Pro Ile Arg Asp Pro Leu Arg 35 40 45

Asp Pro Tyr Xaa Glu Leu Asp Ile His Arg Arg Asp Pro Leu Gly Xaa 50 55 60

Asp Phe Leu Leu Arg Asn Asp Pro Xaa His Arg Leu Ser Thr Xaa Arg 65 70 75 80

Leu Xaa Xaa Ala Asp Arg Ser Phe Arg Asp Arg Glu Pro His Asp Tyr
85 90 95

Ser His His His His His His His Pro Leu Ser Val Asp Pro Arg 100 105 110

Arg Glu His Glu Arg Xaa Gly His Leu Asp Glu Arg Glu Arg Leu His
115 120 125

Met Leu Arg Glu Asp Tyr Glu His Thr Arg Leu His Ser Val His Pro 130 135 140

Ala Ser Leu Asp Gly His Leu Pro His Pro Ser Leu Ile Thr Pro Gly
145 150 155 160

Leu Pro Ser Met His Tyr Pro Arg Ile Ser Pro Thr Ala Gly Asn Gln
165 170 175

Asn Gly Leu Leu Asn Lys Thr Pro Pro Thr Ala Ala Leu Ser Ala Pro 180 185 190

Pro Pro Leu Ile Ser Thr Leu Gly Gly Arg Pro Val Ser Pro Arg Arg 195 200 205

Thr Thr Pro Leu Ser Ala Glu Ile Arg Glu Arg Pro Pro Ser His Thr 210 215 220

Leu Lys Asp Ile Glu Ala Arg 225 230

<210> 1337

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1337

Gly Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu Ser Pro Pro Thr Asp Asn Arg Pro Gly Gln Met Asp Asn Arg Ser Lys Leu Arg Asn Ile Val Glu Leu Arg Leu Ala Gly Leu Asp Ile Thr Asp Ala Ser 40 Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu Ser Lys Leu His Leu 55 Ser Tyr Cys Asn His Val Thr Asp Gln Ser Ile Asn Leu Leu Thr Ala 70 75 Val Gly Thr Thr Arg Asp Ser Leu Thr Glu Ile Asn Leu Ser Asp 90 . . 95 Cys Asn Lys Val Thr Asp Gln Cys Leu Ser Phe Phe Lys Arg Cys Gly 100 ..... 105 ..... 110 Asn Ile Cys His Ile Asp Leu Arg Tyr Cys Lys Gln Val Thr Lys Glu 115 120 Gly Cys Glu Gln Phe Ile Ala Glu Met Ser Val Ser Val Gln Phe Gly 135 135 140 Gln Val Glu Glu Lys Leu Leu Gln Lys Leu Ser 145 150 ... 155 ...

<210> 1338

<211> 328

<212> PRT

<213> Homo sapiens

<400> 1338

Asn Asn Ser Gly Val Met Pro Glu Met Pro Glu Asp Met Glu Gln Glu
1 5 10 15

Glu Val Asn Ile Pro Asn Arg Arg Val Leu Val Thr Gly Ala Thr Gly
20 25 30

Leu Leu Gly Arg Ala Val His Lys Glu Phe Gln Gln Asn Asn Trp His
35 40 45

Ala Val Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val 50 55 60

Asn Leu Leu Asp Ser Asn Ala Val His His Ile Ile His Asp Phe Gln

65					70					75					80
Pro	His	Val	Ile	Val 85	His	Cys	Ala	Ala	Glu 90	Arg	Arg	Pro	Asp	Val 95	Val
Glu	Asn	Gln	Pro 100	Asp	Ala	Ala	Ser	Gln 105	Leu	Asn	Val	Asp	Ala 110	Ser	Gly
Asn	Leu	Ala 115	Lys	Glu	Ala	Ala	Ala 120	Val	Gly	Ala	Phe	Leu 125	Ile	Tyr	Ile
Ser	Ser 130	Asp	Tyr	Val	Phe	Asp 135	Gly	Thr	Asn	Pro	Pro 140	Tyr	Arg	Glu	Glu
Asp 145	Ile	Pro	Ala	Pro	Leu 150	Asn	Leu	Tyr	Gly	Lys 155	Thr	Lys	Leu	Asp	Gly 160
Glu	Lys	Ala	Val	Leu 165	Glu	Asn	Asn	Leu	Gly 170	Ala	Ala	Val	Leu	Arg 175	Ile
Pro	Ile	Leu	Tyr 180	Gly	Glu	Val	Glu	Lys 185	Leu	Glu	Glu	Ser	Ala 190	Val	Thr
Val	Met	Phe 195	Asp	Lys	Val	Gln	Phe 200	Ser	Asn	Lys	Ser	Ala 205	Asn	Met	Asp
His	Trp 210	Gln	Gln	Arg	Phe	Pro- 215	Thr	His	Val	Lys	Asp 220	Val	Ala	Thr	Val
Cys 225	Arg	Gln	Leu	Ala	Glu 230	Lys	Arg	Met	Leu	Asp 235	Pro	Ser	Ile	Lys	Gly 240
Thr	Phe	His	Trp	Ser 245	Gly	Asn	Glu	Gln	Met 250	Thr	Lys	Tyr	Glu	Met 255	Ala
Cys	Ala	Ile	Ala 260	Asp	Ala	Phe	Asn	Leu 265	Pro	Ser	Ser	His	Leu 270	Arg	Pro
Ile	Thr	Asp 275	Ser	Pro	Val	Leu	Gly 280	Ala	Gln	Arg	Pro	Arg 285	Asn	Ala	Gln
Leu	Asp 290	Суз	Ser	Lys	Leu	Glu 295	Thr	Leu	Gly	Ile	Gly 300	Gln	Arg	Thr	Pro
Phe 305	Arg	Ile	Gly	Ile	Lys 310	Glu	Ser	Leu	Trp	Pro 315	Phe	Leu	Ile	Asp	Lys 320
Arg	Trp	Arg	Gln	Thr	Val	Phe	His								

<210> 1339 <211> 64 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1339 Leu Xaa His Pro Phe Ala Val Thr Ser Tyr Gly Lys Asn Leu Tyr Phe 1 5 10 Thr Asp Trp Lys Met Asn Ser Val Val Ala Leu Asp Leu Ala Ile Ser 20 25 . . . . Lys Glu Thr Asp Ala Phe Gln Pro His Lys Gln Thr Arg Leu Tyr Gly 40 Ile Thr Thr Ala Leu Ser Gln Cys Pro Gln Ala Ile Thr Thr Ala Gln 50 8.1. <210> 1340 <211> 155 <212> PRT <213> Homo sapiens <400> 1340 Arg Lys Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys Lys 5 10 Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu 25 Arg Val Phe Thr Thr Asn Asn Gly Arg His His Arg Met Asp Glu Phe 40

Ser Arg Gly Asn Val Pro Ser Ser Glu Leu Gln Ile Tyr Thr Trp Met

Asp Ala Thr Leu Lys Glu Leu Thr Ser Leu Val Lys Glu Val Tyr Pro

Glu Ala Arg Lys Lys Gly Thr His Phe Asn Phe Ala Ile Val Phe Thr

55

1388

85 90 95

Asp Val Lys Arg Pro Gly Tyr Arg Val Lys Glu Ile Gly Ser Thr Met 100 105 110

Ser Gly Arg Lys Gly Thr Asp Asp Ser Met Thr Leu Gln Ser Gln Lys 115 120 125

Phe Gln Ile Gly Asp Tyr Leu Asp Ile Ala Ile Thr Pro Pro Asn Arg 130 135 140

Ala Pro Pro Pro Ser Gly Arg Met Arg Pro Tyr 145 150 155

<210> 1341

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1341

Ala Gln Leu Pro Ser Ser Phe Leu Arg His Arg Gly Val Phe Leu
1 5 10 15

Thr Pro Leu Leu Ala Met Ser Ser His Lys Thr Phe Arg Ile Lys Arg

Phe Leu Ala Lys Lys Gln Lys Gln Asn Arg Pro Ile Pro Gln Trp Ile 35 40 45

Arg Met Lys Thr Gly Asn Lys Ile Arg Tyr Asn Ser Lys Arg Arg His 50 55 60

Trp Arg Arg Thr Lys Leu Gly Leu
65 70

<210> 1342

<211> 270

<212> PRT

<213> Homo sapiens

<400> 1342

Leu Lys Val Ala Gln Thr Asp Gly Val Asn Val Asp Met His Leu Lys
1 5 10 15

Gln Ile Glu Ile Lys Lys Phe Lys Tyr Gly Ile Glu Glu His Gly Lys
20 25 30

Val Lys Met Arg Gly Gly Leu Leu Arg Thr Tyr Ile Ile Ser Ile Leu 40 Phe Lys Ser Ile Phe Glu Val Ala Phe Leu Leu Ile Gln Trp Tyr Ile 55 Tyr Gly Phe Ser Leu Ser Ala Val Tyr Thr Cys Lys Arg Asp Pro Cys Pro His Gln Val Asp Cys Phe Leu Ser Arg Pro Thr Glu Lys Thr Ile 90 85 Phe Ile Ile Phe Met Leu Val Val Ser Leu Val Ser Leu Ala Leu Asn 105 Ile Ile Glu Leu Phe Tyr Val Phe Phe Lys Gly Val Lys Asp Arg Val 115 Lys Gly Lys Ser Asp Pro Tyr His Ala Thr Ser Gly Ala Leu Ser Pro 135 Ala Lys Asp Cys Gly Ser Gln Lys Tyr Ala Tyr Phe Asn Gly Cys Ser 150 155 Ser Pro Thr Ala Pro Leu Ser Pro Met Ser Pro Pro Gly Tyr Lys Leu 165 . 170 170 175 Val Thr Gly Asp Arg Asn Asn Ser Ser Cys Arg Asn Tyr Asn Lys Gln Ala Ser Glu Gln Asn Trp Ala Asn Tyr Ser Ala Glu Gln Asn Arg Met Gly Gln Ala Gly Ser Thr Ile Ser Asn Ser His Ala Gln Pro Phe Asp 210 215 Phe Pro Asp Asp Asn Gln Asn Ser Lys Lys Leu Ala Ala Gly His Glu 235 230 Leu Gln Pro Leu Ala Ile Val Asp Gln Arg Pro Ser Ser Arg Ala Ser 250 . 255 . 245 Ser Arg Ala Ser Ser Arg Pro Arg Pro Asp Asp Leu Glu Ile

<sup>&</sup>lt;210> 1343

<sup>&</sup>lt;211> 94

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

1390

<220> <221> SITE

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<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1343
Gln Glu Leu Arg Ser Pro Ser Arg Ser Pro Ser Pro Pro Pro Lys Ser
                                     10
Pro Pro Trp Thr Thr Gly Gly Ser Leu Cys Glu Gln Leu Ala Phe Arg
             20
Lys Pro Leu Ser Val Phe Lys Gln Lys Val Glu Gly Ala Thr Lys Gln
Ala Ala Val Arg Ala Ser Xaa Cys Arg Pro Leu Pro Cys Ser Ser Ser
Ser Phe Ala Ser Ala Ser Ser Val Met Phe Cys Leu Glu Phe Tyr Leu
                     70
                                          75
 65
Asp Phe Phe Ser Gly Tyr Phe Ser Val Phe Gln Pro Leu Leu
                 85
<210> 1344
<211> 125
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the maturally occurring L-amino acids.
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1344
Tyr Ser Thr Arg Ala Leu Trp Lys Pro Asn His Val His Val Cys Val
                  5
```

Cys Val Cys Ala Ser Phe Glu Pro Pro Ser Thr Ala Ala Ser Ser His 20 25 30

Asp Thr Lys Leu Leu Ile Ser Thr Phe Leu Trp Val Ala Gln Gly Leu 35 40 45

Ile Ala Ser His Ser Ile Thr Arg Ile Glu Ala Arg His Gly Gly Ala 50 55 60

Cys Leu Val Val Pro Ala Lys Leu Gly Arg Leu Glu Gly Arg Glu Gly 65 70 75 80

Ser Leu Trp Ser Pro Gly Arg Leu Glu Gly Trp Gln Trp Ser His Gly 85 90 95

Ser Gly Gly His Trp His Phe Gln Pro Gly Gly Gly Arg Val Glu Thr

Phe Val Leu Gln Lys Xaa Lys Lys Lys Xaa Xaa Gly Gly
115 120 125

<210> 1345

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1345

Pro Arg Val Arg Arg Leu Arg Glu Asp Asp Arg Arg Gly Phe Leu Ser
1 5 10 15

Phe Arg Ala Asp Ser Ala His Ala Ser Met Val Asn Val Pro Lys Thr 20 25 30

Arg Arg Thr Phe Cys Lys Lys Cys Gly Lys His Gln Pro His Lys Val

Thr Gln Tyr Lys Lys Gly Lys Asp Ser Leu Tyr Ala Gln Gly Lys Arg
50 60

Arg Tyr Asp Arg Lys Gln Ser Gly Tyr Gly Gly Gln Thr Lys Pro Ile
65 70 75 80

Phe Arg Lys Lys Ala Lys Thr Thr Lys Lys Ile Val Leu Arg Leu Glu 85 90 95

Cys Val Glu Pro Asn Cys Arg Ser Lys Arg Met Leu Ala Ile Lys Arg 100 105 110

Cys Lys His Phe Glu Leu Gly Gly Asp Lys Lys Arg Lys Gly Gln Val

1392

115 120 125

Ile Gln Phe 130

<210> 1346

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1346

Asn Lys Arg Asn Cys Lys Phe Pro Leu Leu Lys Ile Thr Lys Ile Thr 1 5 10 15

Glu Thr Lys Glu Glu Ile Arg Ile Trp Gly Ile Val Leu Asn Asn Leu 20 25 30

Val Val Lys Lys Asn Asn Cys Ala Cys Leu Asp Leu Asn Lys Pro Pro
35 40 45

Ser Lys Cys Glu Gly Ser Ser Asn Phe Ser Lys His Met Lys Val Leu 50 55 60

Ile His Phe Asp Lys Gly Pro Leu Lys Lys Ser 65 70 75

<210> 1347

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1347

Gly Val Ala Arg Ala Gln Pro Val Pro Ala Val Leu Ser Trp Leu Leu 1 5 10 15

Ala Leu Leu Arg Cys Ala Ala Thr Met Leu Ser Leu Arg Val Pro Leu 20 25 30

Ala Pro Ile Thr Asp Pro Gln Gln Leu Gln Leu Ser Pro Leu Lys Gly
35 40 45

Leu Ser Leu Val Asp Lys Glu Asn Thr Pro Pro Ala Leu Ser Gly Thr 50 55 60

Arg Val Leu Ala Ser Lys Thr Ala Arg Arg Ile Phe Gln Glu Pro Thr 65 70 75 80

Glu Pro Lys Thr Lys Ala Ala Pro Gly Val Glu Asp Glu Pro Leu Leu Arg Glu Asn Pro Arg Arg Phe Val Ile Phe Pro Ile Glu Tyr His 105 Asp Ile Trp Gln Met Tyr Lys Lys Ala Glu Ala Ser Phe Trp Thr Ala 120 Glu Glu Val Asp Leu Ser Lys Asp Ile Gln His Trp Glu Ser Leu Lys 135 Pro Glu Glu Arg Tyr Phe Ile Ser His Val Leu Ala Phe Phe Ala Ala 155 Ser Asp Gly Ile Val Asn Glu Asn Leu Val Glu Arg Phe Ser Gln Glu 170 Val Gln Ile Thr Glu Ala Arg Cys Phe Tyr Gly Phe Gln Ile Ala Met 185 180 Glu Asn Ile His Ser Glu Met Tyr Ser Leu Leu Ile Asp Thr Tyr Ile 200 Lys Asp Pro Lys Glu Arg Glu Phe Leu Phe Asn Ala Ile Glu Thr Met 215 210 Pro Cys Val Lys Lys Ala Asp Trp Ala Leu Arg Trp Ile Gly Asp 230 Lys Glu Ala Thr Tyr Gly Glu Arg Val Val Ala Phe Ala Ala Val Glu 250 Gly Ile Phe Phe Ser Gly Ser Phe Ala Ser Ile Phe Trp Leu Lys Lys Arg Gly Leu Met Pro Gly Leu Thr Phe Ser Asn Glu Leu Ile Ser Arg 280 Asp Glu Gly Leu His Cys Asp Phe Ala Cys Leu Met Phe Lys His Leu 295 Val His Lys Pro Ser Glu Glu Arg Val Arg Glu Ile Ile Asn Ala 305 310 315 Val Arg Ile Glu Gln Glu Phe Leu Thr Glu Ala Leu Pro Val Lys Leu 330 Ile Gly Met Asn Cys Thr Leu Met Lys Gln Tyr Ile Glu Phe Val Ala 345